OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment # 3097
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified	
Location:	General		
Comment:	General		

General 2. All open items need to be tracked and, before construction is initiated, DOE needs to document how these open items were closed out and the documentation provided to the Agencies. All vendor data and reports must be provided to the Agencies for review. Given that there are open items and additional information to be generated at a later date, IDEQ does not consider the Stage II 90% RD/RAWP complete at this time. The Agencies need to discuss how to proceed with submittal and review of these materials in the context of this primary deliverable.

Response by Dave Wilkins. 1. Open Items - We recommend continuing the tracking of open items through the existing Action Item Tracking System. 2. Vendor data - Per Tri-Party Agreement documented in EDF-ER-151, Document Hierarchy and Deliverables (Binder I-A), vendor data will be provided as received (which is after submittal of the RD/RAWP) as an update to the Primary deliverable. We recommend that the Agencies discuss the level of detail desired in the vendor data submittals since we expect "all" would be overwhelming. 3. We assert that the Stage II 90% RD/RAWP submittal is complete at this time. All parties expended considerable effort reaching agreement on the required contents of the RD/RAWP submittal and documenting the agreement in EDF-ER-151. The June submittal contains the agreed-upon content. Further, outlines, early drafts, and incremental submittals were provided for comment well before submittal of the RD/RAWP package to assure that all parties had consistent expectations. Adjustments were then made before formal submittal. 4. We agree that the details regarding post-RD/RAWP submittals and reviews need to be worked out. We recommend initiating these discussions, perhaps as conference call agenda items.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment # 3098
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified	
Location:	General		
Comment:	General		

General 3. Notwithstanding radionuclide decay processes, the Pit 9 inventory seems to be in a constant state of flux. Please summarize the changes made to the inventory since the inception of this project (i.e., how and why the inventory has changed over time).

Response by Rod Thomas. We recommend incorporating the proposed change. Significant (high level) differences in the inventory should be adequately documented.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment #	3099
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified		
Location:	General			
Comment:	General			

General 4. Although it had been agreed that portions of the design could not be completed until vendor data was submitted, it was IDEQ's expectation that the 90% design be completed to the extent possible. For example, there are a number of procedures that were not "fleshed out" yet these procedures appear independent of vendor data. Examples of such include the Spill Prevention, Control and Countermeasures (SPCC) Plan, Project Waste Acceptance Criteria, and procedure for Inspection and Monitoring of Drums in the WMF-669 Temporary Storage Area. The Stage II 90% RD/RAWP must provide all design and operating requirements in order to reach a pre-final inspection or operational readiness review (ORR).

Response by Comment Processing CPT. As discussed at the 10/3/00 Agency Face-to-Face Meeting, no change to the RD/RAWP package is required in response to this comment. As agreed to, and documented in EDF-ER-151, the requirement for the Phase I O&M Plan is to "identify/outline procedures/plans". Detailed procedures are not required as part of the RD/RAWP package. [This is a consolidated response to comments 3099 (Binder I-A) and 3143 (Binder VII-A).]

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment #	3096
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified		
Location:	General			
Comment:	General			

General 1. Effective July 1, 2000, this Agency was elevated to department status. Therefore, reference should no longer be made to the Idaho Department of Health and Welfare/Division of Environmental Quality (IDHW/IDEQ) or variations thereof. Please refer to this Agency as the Idaho Department of Environmental Quality (IDEQ) in all future submittals.

Response by Dave Wilkins. We recommend incorporating the proposed change; a word search would be made to replace Idaho Department of Health and Welfare/Division of Environmental Quality (IDHW/IDEQ) with Idaho Department of Environmental Quality (IDEQ).

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment #	3106
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified		
Location:	PLN-679 RD/RA Workplan Page 102 of 121. Section 13. Paragraph 2			
Comment:				

7. Please elaborate on "with the exception of some characteristic hazardous waste". It would seem that hazardous waste determinations should be performed on all Stage II waste streams to allow for appropriate management and disposition.

Response by Brent Burton. We recommend taking under consideration the collection of data sufficient to support a complete hazardous waste determination during Stage II. The scope and impact of the changes would be defined and evaluated via Change Requests. Current characterization is aimed at satisfying Stage II objectives, including characterization for safe storage. This approach is consistent with an interpretation that a complete HWD is not needed for storage but would be needed if wastes or soils were sent off site or for disposal. Regarding proper management, note that all Pit 9 derived wastes will be managed in compliance with Subpart I of 40 CFR 264 while in CERCLA storage whether characterized as hazardous waste or not (as best management practice per Agency request - see page 19 of EDF-ER-071, 3rd paragraph). [This is a consolidated response to comments 3106 (Binder I-A), 3107 (Binder I-A), 3116 (Binder II), 3118 (Binder II), 3901 (Binder V), and 3991 (Binder I-A).]

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	3991
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Environmental		
Location:	PLN-679 RD/RA Workplan Page 102. Section 13			
Comment:				

219. Given that the Stage II retrieval process allows for discrete removal of wastes rather than homogenization and given that soils, empty drums, and various drummed wastes will be retrieved, the discussion on hazardous waste determination needs clarification. For wastes being shipped outside the AOC, a hazardous waste determination is required to move wastes into a TSDF.. However, for managing wastes within the AOC, waste characterization for safe management is required, which is not the same as a hazardous waste determination.

Response by Brent Burton. We recommend taking under consideration the collection of data sufficient to support a complete hazardous waste determination during Stage II. The scope and impact of the changes would be defined and evaluated via Change Requests. Current characterization is aimed at satisfying Stage II objectives, including characterization for safe storage. This approach is consistent with an interpretation that a complete HWD is not needed for storage but would be needed if wastes or soils were sent off site or for disposal. Regarding proper management, note that all Pit 9 derived wastes will be managed in compliance with Subpart I of 40 CFR 264 while in CERCLA storage whether characterized as hazardous waste or not (as best management practice per Agency request - see page 19 of EDF-ER-071, 3rd paragraph). [This is a consolidated response to comments 3106 (Binder I-A), 3107 (Binder I-A), 3116 (Binder II), 3118 (Binder II), 3901 (Binder V), and 3991 (Binder I-A).]

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment #	3107
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified		
Location:	PLN-679 RD/RA Workplan Page 103 of 121. Section 13.2. Paragraph 3			
Comment:				

8. Although assignment of all applicable characteristic hazardous waste codes may not occur for Stage II activities, there is a need that this determination be made at some point to allow for appropriate final disposition.

Response by Brent Burton. We recommend taking under consideration the collection of data sufficient to support a complete hazardous waste determination during Stage II. The scope and impact of the changes would be defined and evaluated via Change Requests. Current characterization is aimed at satisfying Stage II objectives, including characterization for safe storage. This approach is consistent with an interpretation that a complete HWD is not needed for storage but would be needed if wastes or soils were sent off site or for disposal. Regarding proper management, note that all Pit 9 derived wastes will be managed in compliance with Subpart I of 40 CFR 264 while in CERCLA storage whether characterized as hazardous waste or not (as best management practice per Agency request - see page 19 of EDF-ER-071, 3rd paragraph). [This is a consolidated response to comments 3106 (Binder I-A), 3107 (Binder I-A), 3116 (Binder II), 3118 (Binder II), 3901 (Binder V), and 3991 (Binder I-A).]

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	3992
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Environmental		
Location:	PLN-679 RD/RA Workplan Page 105. Section 13.3			
Comment:				

220. What does the term "managed as listed waste" mean in the context of this CERCLA action? Not all wastes (in addition to graphite) and soil retrieved from Stage II will qualify as listed waste or contained in.

Response by Brent Burton. We recommend that no change to the document be made in response to the comment. It is not agreed that "waste" forms, other than graphite, are appropriately managed without assignment of listed waste codes. Available process knowledge information indicates that, other than graphite, the expected waste forms in the Stage II baseline area are associated with listed waste codes.

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	3926
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Technical		
Location:	PLN-679 RD/RA Workplan Page 106. Section 13.3			
Comment:				

10. The use of digface monitoring equipment for "real-time" characterization of waste and soil is not fully explained in these design documents, nor are the operational procedures to minimize cross contamination explained. Will the germanium detectors provide a soil TRU nuclide assessment? If so, what are the design requirements?

Response by Jim Rose. This comment speaks to the subject of the currently on-going Soils Assay Trade Study. Hence, this comment is being evaluated as part of that study. Since digface characterization of soils and waste is not currently in-scope, a change request should be written to add a new requirement to the baseline as appropriate.

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3108**

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Unspecified

Location: PLN-679 RD/RA Workplan
Page 111 of 121. Table 9

Comment:

9. Total costs for the environmental enclosure facility (EEF) were indicated to have increased by $2.4M. Please provide a detailed breakdown of costs to justify this cost increase. In addition, please indicate whether or not the Title II 90% Design cost for the material handling structure/equipment reflects the current plan for no fissile monitor in the Soil Handling Center (SHC).

Response by Karl Sorman. The commentor is referred to the cost estimate crosswalk sheet (Title I 30% Redesign to Title II 90% Design) provided with the estimate package for explanation of the cost differences. Detail sheets of the estimates will show greater detail of costs. The cost estimate reflects the current plan for no fissile monitors in the SHC.

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3109**

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Unspecified

Location: PLN-679 RD/RA Workplan
Page 113 of 121. Section 14.2. Paragraph 1

Comment:

10. The assumption that sampling be done on a bulk basis and drummed materials be stored in existing Type II storage facilities is not consistent with the current project baseline. For example, due to capacity limitations and availability constraints of the Type II storage modules, the project has designed and plans to build a separate CERCLA storage facility. Please clarify.

Response by Doug Morrell. We recommend that no action be taken based on the comment. The discussed text is taken from the cost comparison between the original concept (October 1997) and the baseline. These concepts addressed were part of the original 1997 concept and are not part of the current project baseline as stated.

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3110**

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Unspecified

Location: PLN-679 RD/RA Workplan
Page 115 of 121. Table 10

Comment:

11. Please retitle this table to avoid using the term "explanation of significant differences" since this term has a much different meaning under CERCLA.

Response by Dave Wilkins. We recommend changing the title of Table 10 to prevent confusion.

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment # 3993
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Environmental	
Location:	PLN-679 RD/RA Workplan Page 115. Table 10		
Comment:			

221. It is not clear the basis for a 20% contingency on the Design and construction costs when the design is at 90% completion. It also appears that the cost estimate includes sunk cost, which would appear unnecessary.

Response by Dave Wilkins. We recommend clarifying the estimate and basis for estimate. Rationale: It is unclear to the reader why and how the contingency and expended cost are accounted for within the cost estimate.

EPA	Reviewer: EPA Wayne Pierre	Significant? No	Comment # 3985
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Environmental	
Location:	PLN-679 RD/RA Workplan Page 12. Section 1.4		
Comment:			

213. Identify the reference (i.e., DOE Order or Directive) for classifying wastes as "orphan"

Response by Brent Burton. We recommend deleting the orphan waste definition presented in the document. Instead of using this term, it is recommended that the corresponding TRU concentration values be presented (i.e., material > 10 nCi/g TRU < 100 nCi/g TRU). References/information explaining the concept of orphan waste can be provided if requested (e.g., DOE 435.1, RRWAC, TRU WAC).

EPA	Reviewer: EPA Vicki Rhoads	Significant? No	Comment # 4046
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Other (clarification/wording)	
Location:	PLN-679 RD/RA Workplan Page 12. Section 1.5		
Comment:			

70. The description of Stage II activities in this section describes an operational readiness review by BBWI and DOE-ID, but no EPA or State of Idaho pre-final inspection. Add a prefinal inspection by both EPA and the State of Idaho to this section.

Response by Phil Rice. We recommend not pursuing the action proposed in the comment. Section 8.7.3 of the RD/RA Work Plan clearly states that the prefinal inspection is performed as specified in the FFA/CO. The prefinal inspection already falls under the jurisdiction of the State and EPA.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA Reviewer: Jim McHugh Significant? Yes Comment # **3918**

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Technical

Location: PLN-679 RD/RA Workplan

Page 13. Section 1.5

Comment:

2. It is stated that post Stage II, the waste can be sorted into categories of less than or equal to 10 nCi/gram, > 10 but less than or equal to 100 nCi/gram, and > 100 nCi/gram. The current design and assay methodology does not provide adequate assurance that the less than or equal to 10 nCi/gram sort will be achieved. This sort (by category) is on a waste/soil container basis, not a population average.

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3100**

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Unspecified

Location: PLN-679 RD/RA Workplan

Page 14 of 121. Section 1.6. Bullet 4

Comment:

1. Please clarify that the goal is to maintain cost within the estimate presented in the 1995 Explanation of Significant Differences (ESD) for the project as a whole, not just Stage II. The estimated cost for Stages I and II was presented in the 1998 ESD ($86M).

Response by Dave Wilkins. We recommend rewording the bullet to clarify that the intent was to maintain the cost within the total project estimate presented in the 1995 ESD and the estimate for Stage I and Stage II in the 1998 ESD. At this point the cost will be significantly beyond the estimate.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	**3919**
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Technical		
Location:	PLN-679 RD/RA Workplan Page 15. Section 1.6			
Comment:				

3. The bounding assumption that technology is currently available to provide adequate digface and material assays of materials excavated from Pit 9 is satisfactory for digface monitoring, but not a satisfactory assumption relative to material assay requirements. NDA assay technology is adequate for TRU waste, but not adequate to meet objectives for the large volume of soil. An alternate strategy for soil (examples submitted for the soil characterization trade study) should be incorporated into the design. Alternate technologies exist to accomplish project objectives.

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment #	**3101**
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified		
Location:	PLN-679 RD/RA Workplan Page 16 of 121. Section 1.8			
Comment:				

2. Assuming that the Agencies are able to reach agreement on an integration strategy for OU 7-10 and OU 7-13/14 probing campaigns, please note that it is IDEQ's position that optimization of the Stage II location will occur based on Campaign 1 and, assuming Campaigns 1 and 2 are collapsed, Campaign 2 data. Siting of the Stage II location is not dependent upon the outcome of Campaigns 3 and 4.

Response by Dave Wilkins. The IDEQ position is noted. Campaigns 1 and 2 are cache specific and are intended to provide information to locate Stage II. Campaigns 3 and 4 are intended to allow determination of predicting waste location and may or may not influence the final Stage II location.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA | Reviewer: EPA Wayne Pierre | Significant? No | Comment # 3986

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Environmental

Location: PLN-679 RD/RA Workplan
Page 19. Table 3

Comment:

214. There appears no correlation between the planned dates listed in Table 3 and the Working Schedule in Binder XXIV. For example line 219 has the draft RA Report being submitted to the Agencies approximately 7 years after the June 2000 submittal of the 90% RD/RAWP, rather then on April 30, 2000.

Response by Comment Processing CPT. Per the 10/3/00 Agency Face-to-Face Meeting, DOE has submitted a request for extension (see EM-ER-188-00). This issue is under review by the three Agencies. [This is a consolidated response to comments 3113 (Binder I-A), 3165 (Binder XXIV), 3986 (Binder I-A), 3998 (Binder I-A), and 4040 (Binder XXIV).]

IDEQ | Reviewer: IDEQ Jean Underwood | Significant? No | Comment # 3102

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Unspecified

Location: PLN-679 RD/RA Workplan
Page 20 of 121. Section 2.2.3

Comment:

3. The Document Hierarchy and Deliverables (EDF-ER-151) is an excellent, well-thought out product. IDEQ recommends that when future projects are being scoped in the early stages, it would beneficial for the Agencies to use a similar level of detail to arrive at realistic timeframes/milestones and to identify a more comprehensive up-front listing of primary and secondary deliverables.

Response by Comment Processing CPT. Comment noted and appreciated.

IDEQ | Reviewer: IDEQ Jean Underwood | Significant? Yes | Comment # 3103

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Unspecified

Location: PLN-679 RD/RA Workplan
Page 23 of 121. Section 3.2. Paragraph 2

Comment:

4. IDEQ does not recognize that the "more expansive WAG 7 Remedial Investigation/Feasibility Study (RI/FS) process should better address long-term consequences of such decisions" such as handling or treatment of non-radiological hazardous waste. Instead, the Agencies had agreed that such a determination was dependent upon the outcome of trade studies to be performed subsequent to Stage II once the types/quantities of waste requiring treatment was better understood (i.e., determination of how a particular waste fraction is managed is dependent upon the volume retrieved).

Response by Dave Wilkins. We recommend rewording the text to address the comment. Rationale: Stage II completes retrieval of waste and soil from the 20 ft by 20 ft focus area and provides temporary safe storage for these retrieved materials. (Approved Change Request (CR) 169 addresses this.) At this point trade studies would be performed to determine treatment options as a function of the amount and classification of the retrieved waste (i.e., determination of how a particular waste fraction is managed is dependent on the waste volume).

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	**3920**
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Technical		
Location:	PLN-679 RD/RA Workplan Page 40, Section 6.1.1			
Comment:				

4. The performance standards provided for the removal of soil and waste, and the subsequent assay, cannot be met with NDA assay equipment that has an MDC of 40 nCi/gram (design specifications). This may be satisfactory for characterizing RFP waste, but not soil. The design process has postponed addressing this NDA assay deficiency/uncertainty hoping that NDA technology would catch up to the basic project requirements. Information is the main product of Stage II and characterization data is a major part of this "information" product. Nothing in the NDA "arena" has changed significantly during the past four years that would provide some level of comfort relative to the possibility of reliable assay at the 10 nCi/gram TRU level. The project must accept the fact that a single NDA assay methodology will not satisfy both waste and soil objectives. Appropriate changes (most likely to be derived from the soil characterization trade study) should be embraced in the design philosophy and incorporated into the design.

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	**3921**
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Technical		
Location:	PLN-679 RD/RA Workplan Page 43, Section 7.1			
Comment:				

5. It is not clear what is meant by "monitoring equipment" used to distinguish between soils with less than or equal to 10 nCi/gram TRU and those with > 10 nCi/gram. Is this the digface monitor or the assay equipment? It does not appear that the design currently embraces monitoring at the digface to assess soil TRU concentrations at these levels. It is a very worthwhile objective to have this capability and determine the usefulness of such monitoring during retrieval operations.

Response by Comment Processing CPT. As agreed to in the 10/2/00 Agency Face-to-Face Meeting, we recommend completing the Soils Trade Study within its current scope. [This is a consolidated response to comments 3921 (Binder I-A), 3933 (Binder II), 3934 (Binder III), 3960 (Binder XI-C), Binder 3962 (Binder XI-C), 3974 (Binder XVII), and 3988 (Binder I-A).]

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	3922
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Technical		
Location:	PLN-679 RD/RA Workplan Page 44. Section 7.1.2			
Comment:				

6. It is stated in the text that current fine assay DQOs require only that measurements be made as current state-of-the-art instrumentation allows. This is an unsatisfactory statement for a DQO. Project objectives, TFRs and SRDs clearly state requirements, and the DQO process and design should embrace these requirements. If there is a problem with the objectives or requirements, then the project direction should be modified. The project has put all their "eggs" in one basket (i.e. NDA assay for all materials retrieved). It is not necessary to use a single methodology to meet objectives. Alternatives exist.

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment #	3104
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified		
Location:	PLN-679 RD/RA Workplan Page 53 of 121. Figure 8			
Comment:				

5. According to activity block W3a, a trade study will be performed if waste items are unable to fit into a 55-gallon drum. Please describe when these particular trade studies will be performed and where these waste items will be "stored" pending the outcome of the trade study.

Response by Phil Rice. We recommend not pursuing any action associated with this comment. The trade study(s) will be performed at the time that the item is discovered. Any waste item that doesn't fit in a 55-gal drum will remain at the digface pending the outcome of the trade study.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA Reviewer: EPA Vicki Rhoads Significant? No Comment # 4047
Document: **Binder I-A Stage II RD/RA Work Plan** Category: Other (clarification/wording)
Location: PLN-679 RD/RA Workplan
Page 57. Section 8.4.1.1
Comment:

71. Text states "The membrane is not designed to function as a structural member such that the integrity of the structural framework will not be affected should any damage to the membrane occur." This is ambiguous. Suggest changing text to state "The membrane is not designed to function as a structural member; specifically, the structural framework will not be affected if the membrane is damaged."(Italics show suggested changes)

Response by Dave Stephens. It is recommended that the text be revised as suggested.

EPA Reviewer: EPA Wayne Pierre Significant? No Comment # 3987
Document: **Binder I-A Stage II RD/RA Work Plan** Category: Rad Safety
Location: PLN-679 RD/RA Workplan
Page 61. Section 8.4.1.6
Comment:

215. It is unclear whether steps are provided to lock-out the potential introduction of water into the retrieval pit from the hoses if the Dig Face Monitor or other data sources indicate that high concentrations of fissile material may be present.

Response by Todd Taylor. The design does not provide automatic lockout against the introduction of water into the retrieval pit when the Digface Monitor indicates high concentrations of fissile material. In the 10/2/00 Agency Face-to-Face Meeting it was ag eed to hold a meeting to discuss and resolve criticality issues. We recommend that this topic be discussed at the meeting.

EPA Reviewer: Jim McHugh Significant? Yes Comment # 3923
Document: **Binder I-A Stage II RD/RA Work Plan** Category: Rad Safety
Location: PLN-679 RD/RA Workplan
Page 68. Section 8.4.3.1
Comment:

7. The MHC upper glovebox assembly provides an enclosed processing area where operators perform waste sizing and sampling using hand-held equipment and power tools. This approach was chosen to simplify operations and save on costs. However, extensive operations with power tools to size waste and drums in gloveboxes poses significant risk to workers. It is important that procedures, training and facility design mitigate these risks to workers to as low level as practicable. This is a major health and safety risk area.

Response by Comment Processing CPT. As agreed to in the 10/3/00 Agency Face-to-Face Meeting, no change to the design is required. This comment was provided as a caution. Any actions with regard to this comment would be addressed in the normal course of developing operating procedures and training.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA | Reviewer: EPA Wayne Pierre | Significant? No | Comment # 3988

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Environmental

Location: PLN-679 RD/RA Workplan
Page 73. Section 8.4.4.3

Comment:

216. It should be noted that the SHC a trade study is ongoing to determine if the SHC will need to be outfitted with additional sample access capability.

Response by Comment Processing CPT. As agreed to in the 10/2/00 Agency Face-to-Face Meeting, we recommend completing the Soils Trade Study within its current scope. [This is a consolidated response to comments 3921 (Binder I-A), 3933 (Binder II), 3934 (Binder III), 3960 (Binder XI-C), Binder 3962 (Binder XI-C), 3974 (Binder XVII), and 3988 (Binder I-A).]

EPA | Reviewer: EPA Wayne Pierre | Significant? Yes | Comment # 3989

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Environmental

Location: PLN-679 RD/RA Workplan
Page 76. Section 8.5

Comment:

217.** It should be clear that any Statement of Work issued by INEEL or its contractor must be in accordance with the design and operating requirements specified in the Agencies' approved Stage II RD/RAWP.

Response by Dave Wilkins. We recommend adding language in the work plan to make it clear that procurement subcontracts will be in compliance with the Agency approved Stage II RD/RA Work Plan.

EPA | Reviewer: Jim McHugh | Significant? Yes | Comment # 3924

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Technical

Location: PLN-679 RD/RA Workplan
Page 78. Section 8.5.2

Comment:

8.** The text states that the DFM represents significant technical risk to the project. However, it is not clear why the DFM represents significant technical risks to the project. The principal objective is to assess the fissile material content of the buried waste. A DFM system will never be a quantitative tool for the fissile material content of buried waste. It is an indicator and semi quantitative at best. Too many variables exist to expect accurate quantitation of fissile gram content (while waste is buried). The DFM is used in conjunction with a retrieval strategy based on batch control to provide nuclear criticality safe operations.

Response by Jim Rose. For clarity we recommend that this document be changed to replace the term "technical risk" with "programmatic/schedule risk". We also agree with the reviewer that the DFM can provide only an estimate of fissile material present in the digface and, since it is a well-developed technology, using gamma spectrometry is not a high technical risk. However, the application of the technology to Pit 9 waste does provide some risk in terms of its effectiveness as a criticality control tool. Unknowns associated with the volume and density of the wastes to be measured and the effects of quantities of other radionuclides that are present do have an impact on the uncertainties associated with the measurements. After the DFM is procured and delivered bounding measurements/testing are planned to assure criticality safety criteria can be met.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment # 3925
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Technical	
Location:	PLN-679 RD/RA Workplan Page 84. Section 8.10		
Comment:			

9.** The digface monitor will not determine a gram equivalent Pu-239; it will provide an estimate of this value. This estimate (or bounding range) will be used to plan retrieval. Retrieval will be controlled and conducted in a batch mode. For the NDA of drums, achieving detection limits with state-of-the-art technology, with one methodology, is highly unlikely. The characterization of the waste should be separate from the characterization of the soil.

Response by Jim Rose. We recommend that this document be changed to reflect that the digface monitor will provide only an estimate of the Pu-239/fissile material present. Further, we agree that it is very difficult to obtain low detection limits with a single methodology using current detection methods, especially for wastes (as opposed to soils). However, it is been determined that gamma spectrometry provides the most information using a single technique. Characterization of either wastes or soils using the digface monitor is not currently in scope.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment # 3105
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified	
Location:	PLN-679 RD/RA Workplan Page 85 of 121. Section 8.10. Paragraph 4		
Comment:			

6. There should only be minimal costs for redesign should the Stage II location be slightly altered from the baseline. If something other than pen/ink changes is envisioned, then the Agencies should discuss redesign efforts before such efforts commence.

Response by Dave Wilkins. We recommend not pursing the action proposed. If a location change is made before beginning construction, a pen and ink change is not acceptable control of a subcontractor. On the other hand, if field conditions indicate a slight change in location is needed after we have begun construction in the field, then a pen and ink change (field change request) is possible.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA Reviewer: EPA Wayne Pierre Significant? No Comment # **3990**

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Environmental

Location: PLN-679 RD/RA Workplan

Comment: Page 85. Section 8.10

218. What modeling is anticipated to predict whether a fire/explosion would occur from driving sheet or H-piles? If the modeling could affect the RD/RAWP requirements, how will this be addressed?

Response by Comment Processing CPT. Per the 10/3/00 Agency Face-to-Face Meeting: An underground fire and/or explosion initiated by shoring pile installation is addressed in Appendix A to USQ Safety Evaluation No. SE-RWMC-99-039. (A copy was provided to the Agencies on 10/9/00.) We recommend adding this USQ to the RD/RAWP package. We also recommend providing additional detail on modeling to be performed, plans for cold testing, and measures planned during installation. Further, we recommend modifying the piling specification to indicate that the Project will provide direction (e.g. driving rates) for piling installation. We do not anticipate the need for design changes, but realize that procedures might have to be updated. [This is a consolidated response to comments 3130 (Binder V), 3163 (Binder XXIV), 3166 (Binder XXIV), 3211 (Binder I-A), and 3990 (Binder I-A).]

EPA Reviewer: EPA Wayne Pierre Significant? No Comment # **3994**

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Environmental

Location: PLN-679 RD/RA Workplan, Appendix B, EDF-ER-151, Document Hierarchy and Deliverables Diagram

Comment:

222. Given that the working schedule suggests that 1 1/2 yrs will be required to perform the retrieval operations, the O&M Plan Phase III will likely undergo change during Operations Activities. This should be reflected on the diagram.

Response by Dave Wilkins. We recommend revising the diagram to indicate allowance of O&M activities to be adjusted as we learn. Rationale: Operations and Maintenance activities will evolve as the project progresses.

EPA Reviewer: EPA Wayne Pierre Significant? No Comment # **3995**

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Environmental

Location: PLN-679 RD/RA Workplan, Appendix B, EDF-ER-151, Document Hierarchy and Deliverables

Comment: Page 10. EDF

223. The O&M Plan Phase IV is actually the O&M procedures for post retrieval operations that include storage operations and retrieval facility standby.

Response by Jeff Bryan. Concur, it's actually both. For clarification, the final operations procedures are planned to be provided as input to the RA Report as well as the proposed O&M procedures for post-retrieval operations (e.g., storage operations and facility cold standby procedures) -- both as a part of the Phase IV update.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # 3111

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Unspecified

Location: PLN-679 RD/RA Workplan, Appendix D, IAG-16 Interface Agreement Between RWMC and Stage II

~~Page 1 of 23~~

Comment:

12. Please indicate when this interface agreement will be updated given the expiration date of "07/27/00".

Response by Jeff Bryan. We recommend updating the RWMC/Stage II Interface Agreement (IAG-16).

EPA Reviewer: EPA Wayne Pierre Significant? No Comment # 3996

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Environmental

Location: PLN-679 RD/RA Workplan, Appendix E, IAG-52 Interface Agreement Between Stage I and Stage II

~~General~~

Comment:

224. This Interface Agreement, dated January 2000 requires updating to reflect current schedule realities.

Response by Jeff Bryan. We recommend updating the Stage I/Stage II Interface Agreement (IAG-52) to reflect current schedule realities.

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # 3112

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Unspecified

Location: PLN-679 RD/RA Workplan, Appendix E, IAG-52 Interface Agreement Between Stage I and Stage II

~~Page 20 of 21~~

Comment:

13. In Requirement No. 3.2.3.5, it can be inferred that the sonic drill rig will need to be stored elsewhere once impervious sealant is applied to the storage facility floor. Please indicate where the sonic drill rig will be stored at that point in time.

Response by Doug Morrell. It is recommended that requirement 3.2.3.5 state that following the sealing of the storage facility floor, Stage I will need to store the drill rig following RWMC accepted methods in a location approved for storage by RWMC operations management.

EPA Reviewer: EPA Wayne Pierre Significant? No Comment # 3997

Document: **Binder I-A Stage II RD/RA Work Plan** Category: Environmental

Location: PLN-679 RD/RA Workplan, Appendix F, Community Relations Plan RD/RA Elements, Para 1.8

Appendix F

Comment:

225. In addition to including the Community Relations Plan, the draft Fact Sheet explaining the Stage II design should be included here.

Response by Dave Wilkins. We recommend revising the Appendix to include the draft Fact Sheet.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment # **3113**
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified	
Location:	PLN-679 RD/RA Workplan, Appendix G, High Level Schedule through Stage II Activites Appendix G		
Comment:			

14. The timeframes presented in the Stage II summary schedule do not support the milestones dates established in the October 1997 OU 7-10 Remedial Design/Remedial Action Scope of Work and Remedial Design Work Plan (RD/RA SOW) or the OU 7-10 Stage I Work Plan (June 1998). Please clarify.

Response by Comment Processing CPT. Per the 10/3/00 Agency Face-to-Face Meeting, DOE has submitted a request for extension (see EM-ER-188-00). This issue is under review by the three Agencies. [This is a consolidated response to comments 3113 (Binder I-A), 3165 (Binder XXIV), 3986 (Binder I-A), 3998 (Binder I-A), and 4040 (Binder XXIV).]

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment # **3998**
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Environmental	
Location:	PLN-679 RD/RA Workplan, Appendix G, High Level Schedule through Stage II Activites Gantt Chart		
Comment:			

226.** This schedule does not meet enforceable deadlines.

Response by Comment Processing CPT. Per the 10/3/00 Agency Face-to-Face Meeting, DOE has submitted a request for extension (see EM-ER-188-00). This issue is under review by the three Agencies. [This is a consolidated response to comments 3113 (Binder I-A), 3165 (Binder XXIV), 3986 (Binder I-A), 3998 (Binder I-A), and 4040 (Binder XXIV).]

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment # **3999**
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Environmental	
Location:	PLN-679 RD/RA Workplan, Appendix G, High Level Schedule through Stage II Activites Gantt Chart		
Comment:			

227.** It appears that the schedule calendar is using working days for durations. Therefore, the time periods identified for FFA/CO activities like document review are incorrect.

Response by Dave Wilkins. We recommend converting the calendar day duration to equivalent working days. Rationale: Schedule line 162, as an example, shows 45 working day duration rather than the equivalent 32 day working days associated with a 45 calendar day duration. Additionally, the DOE has submitted a request for extension (EM-ER-188-00) and this issue is under review by the Tri-party Agencies.

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	4004
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Environmental		
Location:	PLN-679 RD/RA Workplan, Appendix I, Decisions Database Printout Page I-10, D-0056			
Comment:				

232. EPA's comments on the 90% RD for the Storage Building stated, "A major concern we have with the document submitted is that it does not include those component documents which would comprise the 90% Remedial Design and Remedial Action Work Plan, i.e., O&M Plan; Waste Management Plan; QAPjP; detailed cost estimate; Performance Measurement points; critical path schedule; site-specific HASP; etc. as identified in the INEEL RD/RA Guidance."

Response by Mona Dunihoo. We recommend no action be taken in response to this comment. The 90% Storage Package referenced in the comment was an incremental submittal of a portion of the 90% RD/RA Work Plan. As such, it was not intended to be a complete 90% RD/RA Work Plan submittal. The June 2000 90% RD/RA Work Plan submittal contained all of the required content, as agreed to and documented in EDF-ER-151, Document Hierarchy and Project Deliverables. Please note that, as agreed, the project specific Health and Safety Plans (for Construction and Operations) are to be provided post 100% design and prior to ORR.

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	4000
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Environmental		
Location:	PLN-679 RD/RA Workplan, Appendix I, Decisions Database Printout Page I-3, D-0003			
Comment:				

228. No formal decision was made to reduce the MHC throughput to 4dms/day over 2 shifts. It was recognized that throughput by itself was not a project driver. Binder XVI-C includes no distinction on throughput for the various options. In fact it states at page 10, "Facility and equipment must be sized to process on the average 1 drum per hour or 10 drums per day.

Response by Mark Borland. We recommend incorporating the proposed change into the solution. We concur no formal decision was made to reduce the MHC throughput to 4 drums per 2 shift day. The formal decision was in selection of a material processing approach. We recommend revising the decision database to state "Small Manual Option for Manual Handling Cell is selected." For clarification to remaining comment, the statement referenced on page 10 which states "Facility and equipment must be sized to process on the average 1 drum per hour or 10 drums per day", is not a requirement. It was an interpretation of a Reliability requirement. As noted later on page 18 of the same EDF-ER-139, it was determined that the throughput requirement for Stage II was flexible. For example, if the ORR was reduced by 6 months due to equipment simplicity, then 6 months could be added to the retrieval schedule.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment #	3114
Document:	**Binder I-A Stage II RD/RA Work Plan**	Category: Unspecified		
Location:	PLN-679 RD/RA Workplan, Appendix I, Decisions Database Printout Page I-6 of I-15			
Comment:				

15. Please provide copies of both the May 11 and August 27, 1999 letters referenced in Decision No. D-0027.

Response by Mona Dunihoo. We recommend adding these letters to the RD/RAWP package.

OU 7-10 Staged Interim Action Project, Stage II, Title II
Response Report - sorted by Binder/Document

EPA | Reviewer: EPA Wayne Pierre | Significant? Yes | Comment # **4001**

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Environmental

Location: PLN-679 RD/RA Workplan, Appendix I, Decisions Database Printout
Page I-7, D-0034

Comment:

229. No formal decision was made on the use of HELP 3 for modeling the Stage II groundwater risk. In fact, HELP 3 models precipitation leakage rate through landfill covers and liners, neither of which exist with regards to Stage II.

Response by Bob Carpenedo. We recommend that the Decisions Report be corrected since we agree that no decision was made to use HELP 3 for modeling the groundwater risk. In reality this is a closure issue and not a Stage II issue.

EPA | Reviewer: EPA Wayne Pierre | Significant? Yes | Comment # **4002**

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Environmental

Location: PLN-679 RD/RA Workplan, Appendix I, Decisions Database Printout
Page I-8, D-0038

Comment:

230.** A TSCA compliant storage building cannot be located in a floodplain. The discussion concerned whether recontouring the land so that it was outside the floodplain and subsequent construction of the facility would meet TSCA storage requirements.

Response by Brent Burton. We recommend changing the language in the decision database to state: "Recontouring the surrounding land and raising the elevation of the storage building such that it is outside of the 100 year floodplain will meet TSCA storage requirements."

EPA | Reviewer: EPA Wayne Pierre | Significant? Yes | Comment # **4003**

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Environmental

Location: PLN-679 RD/RA Workplan, Appendix I, Decisions Database Printout
Page I-8, D-0042

Comment:

231. The Storage Building location meets the definition of AOC contained in the OU 7-10 SOW.

Response by Doug Morrell. We recommend that no action be taken in response to this comment. The decisions list identifies that the storage building location is acceptable to the Agencies and will be considered in the AOC.

EPA | Reviewer: EPA Wayne Pierre | Significant? Yes | Comment # **4005**

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Environmental

Location: PLN-679 RD/RA Workplan, Appendix J, ARARs Implementation Matrix
761.61(a) (5)

Comment:

233. This citation is outside the scope of the OU 7-10 ROD

Response by Brent Burton. We recommend making no change to the document as a result of the comment. The citation is from the TSCA "megarule" that was included as an ARAR in the 1998 Pit 9 ESD. Thus, it is not apparent why the commentor states that the citation is outside of the scope of the Pit 9 ROD. Further clarification should occur before changing the matrix.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA | Reviewer: EPA Wayne Pierre | Significant? Yes | Comment # 4006

Document: **Binder I-A Stage II RD/RA Work Plan** | Category: Environmental

Location: PLN-679 RD/RA Workplan, Appendix J, ARARs Implementation Matrix Table J1

Comment:

234.** MCP-3475 is not an Agencies' approved document and is not a substitute for compliance with ARARs. A case in point is Section 4.11.6 of the MCP which fails to mention the Off-Site Rule requirements.

Response by Dave Wilkins. We agree that MCP-3475 is not an Agencies' approved document and is not a substitute for compliance with ARARs. We recommend that the ARARs Implementation Matrix remain as is. MCP-3475 is an internal procedure that is intended to implement the referenced CFRs. With regards to the Off-Site Rule requirements, they are covered in the governing Waste Management Plan.

IDEQ | Reviewer: IDEQ Jean Underwood | Significant? No | Comment # 3115

Document: **Binder I-B General Equipment Arrangements** | Category: Unspecified

Location: Sheet A-1 Camera View Layout Plan

Comment:

16. This drawing should be revised to identify the locations of volatile organic compound (VOC) detectors in both the EEF and RAE.

Response by Dave Stephens. It is recommended that the drawing be revised to identify locations of VOC detectors.

IDEQ | Reviewer: IDEQ Jean Underwood | Significant? No | Comment # 3117

Document: **Binder II Process Definition and Data Needs** | Category: Unspecified

Location: DOE/ID-10731 Field Sampling Plan Page 3-16, Section 3.1.8, Item 5

Comment:

18. Given that Stage II sampling costs increased substantially, please verify that the current cost estimate factors in fingerprinting as opposed to laboratory analysis of sludges.

Response by Mark Borland. We recommend further evaluation of incorporating the proposed change into the solution. Currently the Stage II cost estimate includes a lump sum amount for sampling and analysis. We recommend detailing the cost of sampling and analysis based on the projected numbers of samples and the identified types of analysis to be performed.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

STAP

IDEQ | Reviewer: IDEQ Jean Underwood | Significant? Yes | Comment # 3118

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan
Page 3-16, Section 3.1.8, Item 9

Category: Unspecified

Comment:

19. See Specific Comment No. 8 above. [UCN 3107: 8. Although assignment of all applicable characteristic hazardous waste codes may not occur for Stage II activities, there is a need that this determination be made at some point to allow for appropriate final disposition.]

Response by Brent Burton. We recommend taking under consideration the collection of data sufficient to support a complete hazardous waste determination during Stage II. The scope and impact of the changes would be defined and evaluated via Change Requests. Current characterization is aimed at satisfying Stage II objectives, including characterization for safe storage. This approach is consistent with an interpretation that a complete HWD is not needed for storage but would be needed if wastes or soils were sent off site or for disposal. Regarding proper management, note that all Pit 9 derived wastes will be managed in compliance with Subpart I of 40 CFR 264 while in CERCLA storage whether characterized as hazardous waste or not (as best management practice per Agency request - see page 19 of EDF-ER-071, 3rd paragraph). [This is a consolidated response to comments 3106 (Binder I-A), 3107 (Binder I-A), 3116 (Binder II), 3118 (Binder II), 3901 (Binder V), and 3991 (Binder I-A).]

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	3927
Document:	**Binder II Process Definition and Data Needs**	Category: Technical		
Location:	DOE/ID-10731 Field Sampling Plan Page 3-5, Section 3-1			

Comment:

11. A number of DQO sections (particularly QS8 and QS9) pertain to the determination of TRU activity in soils. The assay of soils and the selection of appropriate methodology to achieve measurement objectives at 10 nCi/gram have not been adequately defined. Stating that the required detection level is "as achievable with current state of art" is not acceptable. As stated in previous comments pertaining to DQOs, FSP, design documents and assay system specifications, adequate methods are not specified to accomplish project objectives that pertain to the TRU assay of drums. Relative to the laboratory analysis of soil samples, the analytical method of choice should be gamma ray spectroscopy. Alpha spectroscopy should be used for confirmatory measurements and for a few specific nuclides not amenable to analysis by gamma spectroscopy. Gamma spectroscopy is a fast and nondestructive method that averages the content over a very large sample compared to alpha spectroscopy. The required detection level for alpha spectroscopy analysis of soils should be consistent with the method detection level (about 0.1 pCi/gram, see QAP Table 2-5).

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA Reviewer: Jim McHugh | Significant? Yes | Comment # **3928**

Document: **Binder II Process Definition and Data Needs**

Category: Technical

Location: DOE/ID-10731 Field Sampling Plan

Page 4-10, Section 4.3.2.4

Comment:

12. About 1000 soil drums will require characterization. NDA assay is the current choice. However, achieving reliable detection at less than 10 nCi/gram TRU is not likely to be met. These drums should be characterized by an improved loading, sampling and sample analysis strategy that satisfies characterization objectives.

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

EPA Reviewer: Jim McHugh | Significant? Yes | Comment # **3929**

Document: **Binder II Process Definition and Data Needs**

Category: Technical

Location: DOE/ID-10731 Field Sampling Plan

Page 4-10, Section 4.3.2.5

Comment:

13. This section discusses validating assay results. The current loading and sampling strategy will introduce a considerable uncertainty, and impact the correlation study. Improvement in the loading, sampling and sample analysis strategy will eliminate much of this uncertainty. In fact, the strategy will produce results more reliable than the NDA assay methodology (10 nCi/gram and below). For soil sample analyses, the gamma spectrometric is preferred for TRU characterization, with alpha spectrometric methods used to confirm or provide lower detection levels for specific nuclides.

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA Reviewer: EPA Vicki Rhoads Significant? No Comment # **4053**

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan
Page 4-12, Section 4.3.3.1

Category: Chemistry/Radiochemistry (SMO)

Comment:

77. This section describes fingerprinting of various sludges, that is, identifying specific sludge types based on specific, easily verified, expected characteristics of each. However, there is no clear description of the expected differences.

Response by Mark Borland. We recommend not pursuing the action proposed in the comment. Section B.1 of Appendix B of the Field Sampling Plan (Binder II) provides a tabulated "Methods of Comparison" for various sludge types. The section provides unique identifying parameters for distinguishing each sludge type as well as an application discussion explaining how to utilize the parameter. If additional detail or different format of data is necessary please clarify. (Same as comment 4054)

EPA Reviewer: EPA Vicki Rhoads Significant? No Comment # **4054**

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan
Page 4-12, Section 4.3.3.1

Category: Chemistry/Radiochemistry (SMO)

Comment:

78. A table showing specific characteristics (color, consistency, chemicals present, and expected concentrations) for each sludge type, which is then correlated to expected screening results, would be useful. For example, will trace amounts of carbon tetrachloride in a headspace analysis definitely indicate a specific type? Or will a minimum detected concentration in headspace vapors be needed to determine a specific type? What parameters are indicators (presence of characteristic X suggests a certain type), as opposed to necessary (to be identified as a specific type, characteristic X must be present), as opposed to unique (presence of characteristic X identifies a specific sludge type)? These issues should be discussed in the context of the purpose of fingerprinting sludges.

Response by Mark Borland. We recommend not pursuing the action proposed in the comment. Section B.1 of Appendix B of the Field Sampling Plan (Binder II) provides a tabulated "Methods of Comparison" for various sludge types. The section provides unique identifying parameters for distinguishing each sludge type as well as an application discussion explaining how to utilize the parameter. If additional detail or different format of data is necessary please clarify. (Same as comment 4053)

IDEQ Reviewer: IDEQ Jean Underwood Significant? Yes Comment # **3120**

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan

Page 4-16, Section 4.3.3.10

Category: Unspecified

Comment:

21. Since the waste/stained soil trade studies will likely not be performed until Stage II operations have been completed, it is recommended that the proposed trade study work plan be submitted as a component of the Stage II Remedial Action (RA) Report. The results of the trade studies could then be subsequently submitted as an addendum to the Stage II RA Report (e.g., in an iterative manner similar to that being implemented for the Stage I report) along with the results of any Stage II treatability studies.

Response by Mark Borland. We recommend incorporating the proposed change into the solution. We recommend revising the document hierarchy (Appendix B of the RD/RA Workplan) to reflect providing the disposition trade study workplan as part of the RA report and following the RA report with an Addendum at the completion of the disposition trade study. (same as comment 3121)

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3119**

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan

Page 4-3 and 4-4, Table 4-1

Category: Unspecified

Comment:

20. Please define the triangle symbol " ".

Response by Beth McIlwain. We recommend incorporating a change to correct the symbol. The triangle printed was to have been a "less than or equal to" symbol, per the Word document Field Sampling Plan. (Printer settings may have misinterpreted the symbol.)

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA Reviewer: EPA Vicki Rhoads Significant? No Comment # **4048**

Document: **Binder II Process Definition and Data Needs** Category: Other (clarification/wording)

Location: DOE/ID-10731 Field Sampling Plan

~~Page 4-5, Section 4.3.1.2~~

Comment:

72. Composite interstitial soil samples will be collected for analysis; these samples will be collected in one foot increments from identified grids. The text does not clearly describe how these samples will be combined for compositing; will several samples be collected at each depth increment from a given grid, and then composited? Or will one sample be collected from each depth increment, and used as aliquots for compositing? Compositing can be useful for screening purposes, but the purpose of these soil samples is to show whether contaminants are migrating. If aliquots from different vertical sections are composited, then the results from the blended samples will not be useful for showing contaminant migration, since it will be difficult to show how contamination rises or falls with increasing depth. Please specify the compositing method planned, including the number of aliquots per composite sample, how aliquots will be collected for compositing, and how the aliquots will be mixed to produce the composite sample.

Response by Beth McIlwain. We recommend adding clarification of the compositing method envisioned for collecting samples at the digface. (The original intent was to scoop fractions from the exposed digface surface to make composite sample.)

EPA Reviewer: EPA Vicki Rhoads Significant? No Comment # **4049**

Document: **Binder II Process Definition and Data Needs** Category: Other (clarification/wording)

Location: DOE/ID-10731 Field Sampling Plan

~~Page 4-5, Section 4.3.1.2~~

Comment:

73. The compositing method(s) to be used should be specified for all composite samples specified in Table 4-1.

Response by Beth McIlwain. We recommend adding clarification to Table 4-1, and corresponding text sections, regarding the compositing method to be employed for composite samples.

EPA | Reviewer: EPA Vicki Rhoads | Significant? No | Comment # 4050

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan

Page 4/2. Table 4-1

Category: Statistics

Comment:

74. Forty samples of drummed underburden (less than 10 nCi/gm) soil will be collected for VOC, SVOC, PCBs, and CLP metals analysis, so that a mean concentration of these samples may be obtained. The purpose of this mean concentration is not clear, since individual drums will have to be stored and handled according to what they individually contain, not according to a mean concentration as a group. Individual drums of underburden could contain widely varying concentrations of contaminants of concern, depending on the degree of release from nearby waste drums, and the proximity and original contents of those waste drums.

Response by Comment Processing CPT. As agreed to at the 10/3/00 Agency Face-to-Face Meeting there is no design impact and there is no change required to the RD/RAWP documents as a result of these comments. Samples will be taken from all drums. A subset of the samples will be analyzed in support of safe storage requirements. Anticipated movement of materials from the Storage Facility will be discussed in the RA Report. [This is a consolidated response to comments 4050 (Binder II), 4051 (Binder II), and 4052 (Binder II).]

EPA | Reviewer: EPA Vicki Rhoads | Significant? No | Comment # 4051

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan

Page 4/2. Table 4-1

Category: Statistics

Comment:

75. Please explain the purpose of calculating a mean concentration for these underburden soils, or allow for each drum of underburden soil to be sampled.

Response by Comment Processing CPT. As agreed to at the 10/3/00 Agency Face-to-Face Meeting there is no design impact and there is no change required to the RD/RAWP documents as a result of these comments. Samples will be taken from all drums. A subset of the samples will be analyzed in support of safe storage requirements. Anticipated movement of materials from the Storage Facility will be discussed in the RA Report. [This is a consolidated response to comments 4050 (Binder II), 4051 (Binder II), and 4052 (Binder II).]

OU 7-10 Staged Interim Action Project, Stage II, Title II
Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA Reviewer: EPA Vicki Rhoads | Significant? No | Comment # 4052

Document: **Binder II Process Definition and Data Needs** | Category: Statistics

Location: DOE/ID-10731 Field Sampling Plan
Page 4/2. Table 4-1

Comment:

76. It is noted that a mean concentration of overburden soils (again, for those soils less than 10 nCi/gm) will also be calculated; however, these soils are expected to be relatively unaffected by any releases that have occurred. Hence, they are expected to have fairly homogeneous concentrations. However, if there are wide variations in contamination in overburden soils, the assumption of homogeneity is no longer valid, and each drums' contents should be analyzed for contaminants of concern.

Response by Comment Processing CPT. As agreed to at the 10/3/00 Agency Face-to-Face Meeting there is no design impact and there is no change required to the RD/RAWP documents as a result of these comments. Samples will be taken from all drums. A subset of the samples will be analyzed in support of safe storage requirements. Anticipated movement of materials from the Storage Facility will be discussed in the RA Report. [This is a consolidated response to comments 4050 (Binder II), 4051 (Binder II), and 4052 (Binder II).]

EPA Reviewer: EPA Vicki Rhoads | Significant? No | Comment # 4055

Document: **Binder II Process Definition and Data Needs** | Category: Technical

Location: DOE/ID-10731 Field Sampling Plan
Page 6-14. Section 6.6.4.1

Comment:

79. Table 6.3 states that one, 55-gallon drum each of various kinds of leftover samples are anticipated from digface sampling. However, compatibility among the different kinds of samples that will be placed in a single drum is not taken into account. Leftover sampling material from one sample may not be compatible with leftover material from another sample, and hence, more than one drum of each type of sampling wastes will likely be generated. Compatibility among materials that will be packaged together should be addressed in this text.

Response by Beth McIlwain. We recommend incorporating the proposed change into the solution.

EPA Reviewer: EPA Vicki Rhoads | Significant? No | Comment # 4056

Document: **Binder II Process Definition and Data Needs** | Category: Technical

Location: DOE/ID-10731 Field Sampling Plan
Page 6-14. Section 6.6.4.1

Comment:

80. To a degree, the same comment as above applies to Tables 6.4 and 6.5, although these tables describe an anticipated 171 and 168 total drums of material, respectively. With this number of drums, segregation according to compatibility will be more practical. However, compatibility of wastes should still be discussed in text accompanying these tables.

Response by Beth McIlwain. We recommend incorporating the proposed change into the solution.

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment # 3930
Document:	**Binder II Process Definition and Data Needs**	Category: Technical	
Location:	DOE/ID-10731 Field Sampling Plan Page 6-2, Section 6.2		

Comment:

14.** It is important that digface monitoring identify "free" Am-241. This high specific activity waste form can impact operations if contamination is spread about. This is a much more significant concern than Pu-239 from a contamination control standpoint. The RFP packaging and stabilization of the Am-241 is important in mitigating this concern, as is handling at the digface and MHC.

Response by Comment Processing CPT. The current DFM addresses criticality monitoring requirements. If CR-170 adds digface characterization requirements, solutions such as the reviewer's should be considered for implementing the new requirements. We agree that Am-241 is a significant concern for contamination control; the existing design was developed to mitigate this concern. If CR-170 is implemented, Am-241 data would be available to assist day-to-day retrieval planning. [This is a consolidated response to comments 3930 (Binder II), 3947 (Binder VI), and 3980 (Binder XVIII-A).]

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment # 3931
Document:	**Binder II Process Definition and Data Needs**	Category: Technical	
Location:	DOE/ID-10731 Field Sampling Plan Page 6-6, Section 6.3.2.1		

Comment:

15. It is stated that the collected soil will be dumped into the drum. How will this dumping process be controlled to minimize dust release and assist representative filling? Will the auger sampler handle the range of sampling from soil fines to 2 inch diameter chunks?

Response by Comment Processing CPT. As agreed to in the 10/3/00 Agency Face-to-Face Meeting: (1) We recommend modifying the Field Sampling Plan to describe how dust is controlled during soil drum loading. (2) We recommend that sample representativeness be addressed during the Soils Trade Study, and that changes to RD/RAWP documents would be based on the trade study results via Change Request 170.

EPA Reviewer: Jim McHugh Significant? Yes Comment # 3932

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan
Page 6-9, Section 6.5

Category: Technical

Comment:

16. It is stated that the archive sample will be contained in a glass 250-ml bottle. To minimize handling and simplify TRU characterization, samples should be placed directly in containers that are consistent with the geometry requirements for gamma spectrometric TRU measurements. Use glass bottles to meet waste characterization requirements (organics, etc.), but use plastic containers for radionuclides measurements.

Response by Mark Borland. We recommend not pursuing the action proposed in the comment. The planned approach for sample analysis is the use the Analytical Laboratory department at INTEC of the INEEL. This lab will perform both radiological and chemical analysis. Using one sample container greatly simplifies sample processing including packaging, transportation handling, and data management. The proposed approach would essentially double the number of samples collected. If radiological analyses were to be performed at a different location than the chemical analyses, then the proposed change to sample containers would have technical merit.

IDEQ Reviewer: IDEQ Jean Underwood Significant? Yes Comment # 3121

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan
Page 6-9, Section 6.5, Paragraph 3

Category: Unspecified

Comment:

22. Waste treatment trade studies should be performed as part of Stage II since this information dictates the types of treatability studies that may/may not be performed as part of Stage II. Note that DOE-ID approved Change Request No. CR 169 which added the referenced trade studies to the scope of Stage II.

Response by Mark Borland. We recommend incorporating the proposed change into the solution. We recommend revising the document hierarchy (Appendix B of the RD/RA workplan to reflect providing the disposition trade study workplan as part of the RA report and following the RA report with an Addendum at the completion of the disposition trade study. (same as 3120)

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA Reviewer: EPA Vicki Rhoads Significant? No Comment # 4057

Document: **Binder II Process Definition and Data Needs**

Location: DOE/ID-10731 Field Sampling Plan
Page 7-3, Section 7.2.1

Category: Chemistry/Radiochemistry (SMO)

Comment:

81. Text states that samples will be preserved "according to the requirements of the QAPjP (INEEL 1997)." According to that QAPjP, some liquid samples require preservation with acids, in addition to being cooled to specified temperatures. For example, liquid samples for CLP Metals analysis requires acidification with HNO3 to a pH less than 2. Please confirm whether this acidification will react poorly with any anticipated liquid samples.

Response by Beth McIlwain. We recommend incorporating a change to clarify liquid (or unknown liquid) versus water matrix and how preservation measures will be applied.

IDEQ Reviewer: IDEQ Jean Underwood Significant? Yes Comment # 3116

Document: **Binder II Process Definition and Data Needs**

Location: EDF-1260 Stage II, Data Quality Objectives
Page 12 of 14, Section 3.2.2

Category: Unspecified

Comment:

17. See Specific Comment No. 8 above. [UCN 3107: 8. Although assignment of all applicable characteristic hazardous waste codes may not occur for Stage II activities, there is a need that this determination be made at some point to allow for appropriate final disposition.]

Response by Brent Burton. We recommend taking under consideration the collection of data sufficient to support a complete hazardous waste determination during Stage II. The scope and impact of the changes would be defined and evaluated via Change Requests. Current characterization is aimed at satisfying Stage II objectives, including characterization for safe storage. This approach is consistent with an interpretation that a complete HWD is not needed for storage but would be needed if wastes or soils were sent off site or for disposal. Regarding proper management, note that all Pit 9 derived wastes will be managed in compliance with Subpart I of 40 CFR 264 while in CERCLA storage whether characterized as hazardous waste or not (as best management practice per Agency request - see page 19 of EDF-ER-071, 3rd paragraph). [This is a consolidated response to comments 3106 (Binder I-A), 3107 (Binder I-A), 3116 (Binder II), 3118 (Binder II), 3901 (Binder V), and 3991 (Binder I-A).]

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	**3933**
Document:	**Binder II Process Definition and Data Needs**	Category: Technical		
Location:	Review and Comments			
	General			

Comment:

17. The resolution of a number of comments pertaining to sampling and analysis strategies was deferred to a trade study. The trade study was to consider various options necessary to meet soil segregation and characterization requirements. The trade study has not been completed. Important considerations were NDA assay of soil entering drums, automatic sample splitting between hopper and drum, and/or an improved loading and sampling strategy for soil drums. It is necessary to complete this trade study to finalize the design.

Response by Comment Processing CPT. As agreed to in the 10/2/00 Agency Face-to-Face Meeting, we recommend completing the Soils Trade Study within its current scope. [This is a consolidated response to comments 3921 (Binder I-A), 3933 (Binder II), 3934 (Binder III), 3960 (Binder XI-C), Binder 3962 (Binder XI-C), 3974 (Binder XVII), and 3988 (Binder I-A).]

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	**3934**
Document:	**Binder III Cmt Res- SII Prces/Defn & Env Docs**	Category: Technical		
Location:	Comment Resolutions			
	General			

Comment:

18. The resolution of a number of comments pertaining to digface monitoring, sampling and analysis strategies was deferred to a trade study. It is necessary to complete this trade study to finalize the design.

Response by Comment Processing CPT. As agreed to in the 10/2/00 Agency Face-to-Face Meeting, we recommend completing the Soils Trade Study within its current scope. [This is a consolidated response to comments 3921 (Binder I-A), 3933 (Binder II), 3934 (Binder III), 3960 (Binder XI-C), Binder 3962 (Binder XI-C), 3974 (Binder XVII), and 3988 (Binder I-A).]

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	**4017**
Document:	**Binder V Env/Saf/Q Docs**	Category: Environmental		
Location:	DOE/ID-10789 Waste Management Plan			
	General			

Comment:

245. Discussion concerning Stage I coring requires updating

Response by Brent Burton. We recommend updating the waste management plan concerning Stage I coring.

IDEQ Reviewer: IDEQ Jean Underwood Significant? Yes Comment # **3124**

Document: **Binder V Env/Saf/Q Docs** Category: Unspecified

Location: DOE/ID-10789 Waste Management Plan
Page 3-8. Section 3.2

Comment:

25. In cases of discrete containers of liquids, it appears that these will not be stabilized before going to storage. This is contrary to the requirement that there be no free liquids sent to the CERCLA storage facility.

Response by Brent Burton. We recommend adding clarifying language in the Waste Management Plan, Chemical Compatibility Assessment Report, and EDF-ER-137 (Liquid Waste EDF), specifying temporary storage of unknown liquids in the RAE rather than the storage building (i.e., pending characterization results and evaluation). This approach is subject to space limitations. In the event space is not available, temporary storage in the EEF is the next preferred location. A special case handling procedure would be developed to guide these activities.

EPA Reviewer: EPA Kashdan_Flannery Significant? No Comment # **3902**

Document: **Binder V Env/Saf/Q Docs** Category: Chemistry/Radiochemistry (SMO)

Location: DOE/ID-10789 Waste Management Plan
Page 4-10. Section 4.2.2.1

Comment:

88. For operations wastes, under the subheading "PPE", the text states that personnel in the soil handling center will wear launderable work coveralls; where will this clothing be laundered, and how will wastewater from this laundry be managed?

Response by Brent Burton. We recommend not making a change to the document. The PPE is sent to an approved offsite vendor under an INEEL subcontract. This activity is not a project specific task and generates no waste streams under control of the project.

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3125**

Document: **Binder V Env/Saf/Q Docs** Category: Unspecified

Location: DOE/ID-10789 Waste Management Plan
Page 4-10. Section 4.2.2.1. Paragraph 3

Comment:

26. Please indicate whether or not decontamination wastes will be placed in the same 55-gallon drum of waste materials processed in the Material Handling Center (MHC) just prior to decon. If not, then the procedures for containerizing decontamination wastes must be described.

Response by Brent Burton. We recommend revising the Waste Management Plan to clarify that the plan is to separately drum secondary decontamination wastes in the MHC.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA	Reviewer: EPA Kashdan_Flannery	Significant? No	Comment #	**3903**
Document:	**Binder V Env/Saf/Q Docs**	Category: Industrial Hygiene		
Location:	DOE/ID-10789 Waste Management Plan Page 4-12. Section 4.2.2.2			
Comment:				

89. Please address this same issue regarding launderable PPE for maintenance wastes under the subheading PPE, with regard to the location of the laundry and how wastewater from it will be handled.

Response by Brent Burton. We recommend not making a change to the document. The PPE is sent to an approved, offsite vendor under an INEEL subcontract. This activity is not a project specific task and generates no waste streams under control of the project.

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	**4015**
Document:	**Binder V Env/Saf/Q Docs**	Category: Environmental		
Location:	DOE/ID-10789 Waste Management Plan Page 4-2. Section 4.1.1			
Comment:				

243.** Stage II is a post-ROD activity and the waste generated are remediation waste, which must be managed on-site in accordance with the ROD stated ARARs.. Whether we choose to label this wastes as IDW, it is not equivalent to RI/FS samples which can be returned to the sample site. Return of wastes to the pit would need to be in accordance with the ROD criteria.

Response by Brent Burton. We recommend that Section 4.1.1 (discussion of IDW management) be removed from the waste management plan as it is agreed that ROD criteria apply, the section adds little value, and may cause confusion.

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	**4016**
Document:	**Binder V Env/Saf/Q Docs**	Category: Environmental		
Location:	DOE/ID-10789 Waste Management Plan Page 4-6. Section 4.1.4			
Comment:				

244. The statement that Pit 9 derived materials will be analyzed for PCB's requires clarification as to what representative sampling methodology will be applied. For example, for soils will the procedures proposed for listed wastes be applied?

Response by Brent Burton. We recommend that no change to the waste management plan be made because the OU 7-10 Stage II Field Sampling Plan adequately defines the sampling methodologies for the project, including sampling for PCBs.

OU 7-10 Staged Interim Action Project, Stage II, Title II
Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA Reviewer: EPA Kashdan_Flannery Significant? No Comment # **3901**

Document: **Binder V Env/Saf/Q Docs** Category: Chemistry/Radiochemistry (SMO)

Location: DOE/ID-10789 Waste Management Plan
Page 4-8. Section 4.2.1.2

Comment:

87. Please explain how this project will ensure that listed/characteristic soils will be properly identified and handled, when not all drums potentially containing these listed or characteristic wastes will be sampled and analyzed. Even for underburden soils, it is not clear how the stated analyses will identify listed or characteristic wastes in each drum.

Response by Brent Burton. We recommend taking under consideration the collection of data sufficient to support a complete hazardous waste determination during Stage II. The scope and impact of the changes would be defined and evaluated via Change Requests. Current characterization is aimed at satisfying Stage II objectives, including characterization for safe storage. This approach is consistent with an interpretation that a complete HWD is not needed for storage but would be needed if wastes or soils were sent off site or for disposal. Regarding proper management, note that all Pit 9 derived wastes will be managed in compliance with Subpart I of 40 CFR 264 while in CERCLA storage whether characterized as hazardous waste or not (as best management practice per Agency request - see page 19 of EDF-ER-071, 3rd paragraph). [This is a consolidated response to comments 3106 (Binder I-A), 3107 (Binder I-A), 3116 (Binder II), 3118 (Binder II), 3901 (Binder V), and 3991 (Binder I-A).]

EPA Reviewer: EPA Kashdan_Flannery Significant? No Comment # **3899**

Document: **Binder V Env/Saf/Q Docs** Category: Chemistry/Radiochemistry (SMO)

Location: DOE/ID-10789 Waste Management Plan
Page 4-8. Section 4.2.1.2

Comment:

85. Text on this page states that it is not automatically assumed that listed or characteristic waste codes apply to non-stained interstitial and underburden soils. Per this text, listed/characteristic waste codes will only apply if analysis shows that specific codes do apply.

Response by Brent Burton. We recommend that the language in the last sentence of Section 4.2.1.2 be revised to clarify that a hazardous waste determination or evaluation will be performed and that the word "analysis" be deleted so as to not imply that analytical data drives the HWD (i.e., for listed wastes). As written, the waste management plan presents an approach that does not characterize non-stained soils as listed or characteristic wastes. The intent of the plan is to make this determination during Stage II operations based on the data collected and observations of the digface conditions (e.g., origin of drums relative to other drums/potential for cross-contamination etc.). For listed codes, the HWD will primarily be based on the observational information vs. analytical data as the determination is process knowledge driven (i.e., did the soils contact a listed waste source?).

EPA Reviewer: EPA Kashdan_Flannery Significant? No Comment # **3900**

Document: **Binder V Env/Saf/Q Docs** Category: Chemistry/Radiochemistry (SMO)

Location: DOE/ID-10789 Waste Management Plan
Page 4-8. Section 4.2.1.2

Comment:

86. In the FSP (Binder 2, Table 4-1, page 4-3), it appears that not all drums of non-stained soils will be sampled for analysis. Table 4-1 in the FSP shows that no samples of drummed, non-stained, less than 10 nCi/gm, interstitial soils will be sampled for VOC, SVOC, PCBs, CLP metals, or any other analysis. For drummed underburden soils less than 10 nCi/gm, only 40 samples will be collected for VOCs, SVOCs, PCBs, and CLP metals. According to the Waste Management Plan (p 4-8). The total estimated volume of interstitial and underburden soils is expected to total between 619 and 747 drums.

Response by Beth McIlwain. We recommend adding clarification of proposed sampling of non-stained, less than or equal to 10 nCi/g soil. (FSP presents statistical estimation of true mean concentration of VOC, SVOC, PCB, and metals to confirm contaminants are not at levels of concern. Underburden and overburden are mentioned specifically).

EPA Reviewer: Jim McHugh Significant? Yes Comment # **3936**

Document: **Binder V Env/Saf/Q Docs** Category: Technical

Location: DOE/ID-10790 Pollution Prevention/Waste Minimization Plan
Page 3-13. Section 3.2.5

Comment:

20. The auger sampler should always be surveyed/swiped for radiological contamination, and the "cleanliness state" based on results of the survey. Visual observations are not satisfactory to determine the cleanliness of the sampling device.

Response by Brent Burton. We recommend that the language in this document be revised to ensure consistency with the language in section 6.3.3.3 of the FSP.

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	3937
Document:	**Binder V Env/Saf/Q Docs**	Category: Technical		
Location:	DOE/ID-10790 Pollution Prevention/Waste Minimization Plan Page 3-13. Section 3.2.6			
Comment:				

21. The ability of the proposed assay system to reliably determine waste/soil TRU content at 10 nCi/g has not been demonstrated. Since this is the case, the project should not be relying on the assay system to make TRU classification decisions for materials containing low concentrations of TRU (especially soils).

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	3938
Document:	**Binder V Env/Saf/Q Docs**	Category: Editorial		
Location:	DOE/ID-10790 Pollution Prevention/Waste Minimization Plan Page 3-14. Section 3.2.6			
Comment:				

22. The quantity defined as 200 nCi/g should read 200 grams fissile material. The repackaging is based on exceeding 200 grams of fissile equivalent material.

Response by Jim Rose. We recommend incorporating the proposed change. The quantity 200 nCi/g should be 200 grams.

EPA	Reviewer: EPA Kashdan_Flannery	Significant? No	Comment #	3904
Document:	**Binder V Env/Saf/Q Docs**	Category: Industrial Safety		
Location:	DOE/ID-10790 Pollution Prevention/Waste Minimization Plan Page 3-15, Section 3.2.7			
Comment:				

90. Text states that drums whose materials show indications of incompatibility (i.e., generation of gas, fumes, or heat) during the retrieval and handling processes will be placed in short term isolated storage. Since this part of the text discusses the CERCLA storage building, it appears that this will also be the location of this short term storage; however, this is not clear. Suggest that these drums remain within primary confinement to limit any releases that could occur as a result of incompatibility, and to facilitate drum opening and re-segregating incompatible items.

Response by Brent Burton. We recommend that the text of the Pollution Prevention/Waste Minimization Plan, EDF-ER-137, Chemical Compatibility Assessment Report and the Waste Management Plan be clarified as follows: (1) Incompatible or unknown wastes, at a minimum, will be placed in isolated storage pending final characterization; (2) pending characterization the preferred storage location is in the RAE subject to space limitations; and (3) If RAE storage space is not available, storage in the EEF is the next preferred location. A special case handling procedure would be developed to address this management scenario. Separated storage in the CERCLA storage facility is also viewed as compliant/viable but is not the preferred option.

EPA	Reviewer: EPA Kashdan_Flannery	Significant? No	Comment #	3905
Document:	**Binder V Env/Saf/Q Docs**	Category: Other (clarification/wording)		
Location:	DOE/ID-10790 Pollution Prevention/Waste Minimization Plan Page 3-15, Section 3.2.7.1			
Comment:				

91. Text lists criteria for return to pit (RTP) wastes; the way this is phrased suggests that wastes must be less than or equal to 10 nCi/gm, must meet the threshold criteria for residual risk for COC; and must contain PCBs above 50 ppm. This should be rephrased; one of the criteria for RTP wastes is that PCB concentrations be less than 50 ppm (not above 50 ppm).

Response by Brent Burton. We recommend that the referenced text be changed as requested such that it is clear that materials would have to be less than 50 ppm when excavated to qualify for return to pit.

OU 7-10 Staged Interim Action Project, Stage II, Title II
Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	3939
Document:	**Binder V Env/Saf/Q Docs**	Category: Technical		
Location:	DOE/ID-10790 Pollution Prevention/Waste Minimization Plan Page 3-15, Section 3.2.7.1			
Comment:				

23. The ability of the proposed assay system to reliably determined waste/soil TRU content at 10 nCi/g has not been demonstrated. Since this is the case, one should not be relying on the assay system to make TRU classification decisions for materials containing low concentrations of TRU (especially soils).

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	4018
Document:	**Binder V Env/Saf/Q Docs**	Category: Environmental		
Location:	DOE/ID-10790 Pollution Prevention/Waste Minimization Plan Page 3-19, Section 3.3			
Comment:				

246. This section needs updating concerning Stage I coring.

Response by Brent Burton. We recommend updating the plan concerning Stage I coring.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment #	3126
Document:	**Binder V Env/Saf/Q Docs**	Category: Unspecified		
Location:	DOE/ID-10790 Pollution Prevention/Waste Minimization Plan Page 3-29. Section 3.7			
Comment:				

27. This section describes potential waste minimization opportunities that could be implemented but have not been integrated into any particular process. The potential opportunities described concern collection of characterization data up front in the process to conduct complete hazardous waste determinations, collecting data required by WIPP and the INEEL AMWTF, and characterization of secondary wastes associated with Pit 9 derived wastes. It is strongly recommended that DOE integrate these opportunities into the applicable process so that decisions are made on analytical data. The added benefit is that this should minimize reopening and extra handling of drums once in storage which should save considerable costs and reduce unnecessary exposure to site workers.

Response by Comment Processing CPT. As agreed to in the 10/3/00 Agency Face-to-Face meeting, we propose to do all data collection as required by the DQOs. Further, EDF-ER-151, Document Hierarchy and Deliverables, should be modified to show that the Stage II RA Report must include an evaluation of the disposition of all retrieved soils and waste from the Stage II excavation area, including the collection of data and an evaluation of long-term management strategies for the waste and soil.

EPA	Reviewer: Jim McHugh	Significant? No	Comment #	3935
Document:	**Binder V Env/Saf/Q Docs**	Category: Technical		
Location:	DOE/ID-10790 Pollution Prevention/Waste Minimization Plan Page 3-5. Section 3.2.1.1.2			
Comment:				

19. The gamma radiation detection monitor described here for the digface does not appear to be entirely consistent with the technical descriptions provided in the design documents for the digface monitoring equipment.

Response by Jim Rose. Since the write-up given in Section 3.2.1.1.2 can be misinterpreted, we recommend this section be re-written to be more consistent with the technical descriptions provided in other design documents.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	3940
Document:	**Binder V Env/Saf/Q Docs**	Category: Rad Safety		
Location:	EDF-ER-168 Radiological Control Page 1/RAF			
Comment:				

24. The Stage II document states that the ventilation system design for the RAE provides sufficient capacity and proper flow pattern to prevent the spread and build up of lose surface and airborne contamination. The nature of the operations and the digface monitoring, and the handling of high specific alpha activity materials are important considerations in this assessment. For example, handling breached waste containers containing "free" Am 241 pose significantly greater risk to spread of contamination than the other radionuclides in the waste. This also has significant implications regarding ALARA for retrieval operations and future decommissioning. Flexibility to control airflow patterns and capture materials at the source is an important design consideration. One may also need local/recirculation HEPA filters at the digface to capture materials during critical handling operations. Radiological Engineering must continually evaluate this aspect of the operation as it develops.

Response by Comment Processing CPT. As agreed to in the 10/2/00 Agency Face-to-Face Meeting, we recommend reviewing the design for its ability to accommodate the addition of local recirculation HEPA filtering at the digface. Necessary interfaces and capabilities should be identified. Any necessary design changes should be handled via the CR process.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment #	3127
Document:	**Binder V Env/Saf/Q Docs**	Category: Unspecified		
Location:	INEEL/EXT-2000-000690 Preliminary Criticality Safety Evaluation Page 13, Section 6.4			
Comment:				

28. It is unclear why the criticality safety of the SHC was evaluated at the 30% design level given that the design has matured to the 90% level. Please evaluate the criticality safety of the SHC based on the 90% design.

Response by Todd Taylor. We recommend no change to the document. The 30% design package was used for consistency. We recognize that even though the design has progressed, the control on the SHC is fissile mass, which will not be affected by the design. The preliminary CSE is adequate since it defines the appropriate physical and administrative controls.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment #	3128
Document:	**Binder V Env/Saf/Q Docs**	Category: Unspecified		
Location:	INEEL/EXT-2000-000690 Preliminary Criticality Safety Evaluation Page 17, Section 6.5			
Comment:				

29. It is unclear why the criticality safety of the MHC was evaluated at the 30% design level given that the design has matured to the 90% level. Please evaluate the criticality safety of the MHC based on the 90% design.

Response by Todd Taylor. We recommend no change to the document. The 30% design package was used for consistency. We recognize that even though the design has progressed, the control on the MHC is fissile mass, which will not be affected by the design. The preliminary CSE is adequate since it defines the appropriate physical and administrative controls.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment # 3129
Document:	**Binder V Env/Saf/Q Docs**	Category: Unspecified	
Location:	INEEL/EXT-2000-000690 Preliminary Criticality Safety Evaluation Page 19. Section 7.2.1. Paragraph 2		
Comment:			

30. An engineering device to control the build-up of fissile material within the SHC system may be required pending further evaluation. This should be determined and included as part of the 90% design.

Response by Comment Processing CPT. Per Tri-Party agreement at the 10/3/00 Agency Face-to-Face meeting, we recommend revising Phase I O&M Plan Procedure EOP-006 Sections 4.5 and 4.6 to include limiting clogging and build ups in the SHS for criticality control, and to address the potential role of the digface monitor in criticality control. [This is a consolidated response to comments 3129 (Binder V) and 3906 (Binder V).]

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment # 3941
Document:	**Binder V Env/Saf/Q Docs**	Category: Technical	
Location:	INEEL/EXT-2000-000690 Preliminary Criticality Safety Evaluation Page 4. Table 1		
Comment:			

25. Table 1 lists maximum Pu content (single drum basis) for the waste types expected in the Stage II. These data are taken from the RFP shipping records. Many examples have been observed of RFP shipping records significantly underestimating Pu content. For example, the Kudera report shows an average 190 grams per drum for graphite materials, with a reasonable likelihood of encountering a drum of this waste with > 1 kg Pu. Using RFP shipping records to determine an upper bound to the Pu content of waste forms (especially from this waste disposal era) is misleading without a complete discussion of uncertainties.

Response by Todd Taylor. Because the potential for an overloaded drum exists, a means to identify the package must be used prior to disturbing the waste. The 1 kg value was developed based on NDA data obtained for above-ground waste and shipping data describing the waste types in the 40 x 40 area. It is recognized that the potential exists for greater than 1 kg quantities, but the result is the same: a digface monitor is required to identify unsafe masses. In the 10/2/00 Agency Face-to-Face Meeting it was agreed to hold a meeting to discuss and resolve criticality issues. We recommend this topic be part of the agenda for that meeting. [This is a consolidated response to comments 3941 (Binder V), 3942 (Binder V), and 3943 (Binder V).]

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	**3943**
Document:	**Binder V Env/Saf/Q Docs**	Category: Technical		
Location:	INEEL/EXT-2000-000690 Preliminary Criticality Safety Evaluation Page 5. Section 2.1			
Comment:				

27. The probability of encountering an overloaded drum is most likely low based on the number of waste drums and the estimated total Pu content of the waste. Using just the RFP waste records, and post 1970 RFP waste and INEEL NDA data, to define upper bounds to the fissile material content of waste drums, does not adequately address a "worst case" scenario. One must consider the particular waste and project/estimate uncertainties in RFP waste records. Large uncertainties exist in the quantities of Pu in RFP waste, as can be seen by comparing the Table 2 fissile material value with the RFP declared value. Waste reduction, recovery and accountability methods improved over the years; therefore, waste drums in the '50s and '60s should be considered more suspect.

Response by Todd Taylor. Because the potential for an overloaded drum exists, a means to identify the package must be used prior to disturbing the waste. The 1 kg value was developed based on NDA data obtained for above-ground waste and shipping data describing the waste types in the 40 x 40 area. It is recognized that the potential exists for greater than 1 kg quantities, but the result is the same: a digface monitor is required to identify unsafe masses. In the 10/2/00 Agency Face-to-Face Meeting it was agreed to hold a meeting to discuss and resolve criticality issues. We recommend this topic be part of the agenda for that meeting. [This is a consolidated response to comments 3941 (Binder V), 3942 (Binder V), and 3943 (Binder V).]

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment #	**3942**
Document:	**Binder V Env/Saf/Q Docs**	Category: Technical		
Location:	INEEL/EXT-2000-000690 Preliminary Criticality Safety Evaluation Page 5. Table 2			
Comment:				

26. The data cited in the text are the result of the INEEL NDA evaluation of post 1970 RFP waste drums. The waste disposal practices at the RFP changed considerably from the *50s to the *70s. Utilizing these recent data without discussion of the significant differences in waste handling practices prior to the *70s is misleading. Also, are the waste codes consistent between the *50s, 60*s and *70s? The waste code stated for the drum with a maximum measured fissile mass of 1,138 grams is code 393, not 376. This is a slag material type waste drum. This particular drum lists 81 pounds as the net weight of waste. Using the Pu maximum content value listed in the table, this equates to an average Pu concentration of 3.1 %. Also, this particular drum contains 60 % void space. These are important factors to be considered in a nuclear criticality safety evaluation of buried fissile waste material. Waste drums are not always filled to capacity, and the Pu is not uniformly distributed.

Response by Todd Taylor. Because the potential for an overloaded drum exists, a means to identify the package must be used prior to disturbing the waste. The 1 kg value was developed based on NDA data obtained for above-ground waste and shipping data describing the waste types in the 40 x 40 area. It is recognized that the potential exists for greater than 1 kg quantities, but the result is the same: a digface monitor is required to identify unsafe masses. In the 10/2/00 Agency Face-to-Face Meeting it was agreed to hold a meeting to discuss and resolve criticality issues. We recommend this topic be part of the agenda for that meeting. [This is a consolidated response to comments 3941 (Binder V), 3942 (Binder V), and 3943 (Binder V).]

EPA	Reviewer: Jim McHugh	Significant? No	Comment #	3944
Document:	**Binder V Env/Saf/Q Docs**	Category: Project Objectives		
Location:	INEEL/EXT-2000-000690 Preliminary Criticality Safety Evaluation Page 6. Section 2.2.2			
Comment:				

28. This section infers considerable sampling at the digface. It is stated that samples of waste/material and soil will be collected for further analyses after the digface monitor has scanned the surface and Pu radiation levels are determined. Is this consistent with the Sampling and Analysis Plan?

Response by Mark Borland. We recommend incorporating the proposed change into the solution. The CSE is correct in stating samples will be collected from grid locations following digface monitor scanning. The inference that a sample will be collected from every grid location is incorrect and not intended. Only biased and random grid locations identified in the Field Sampling Plan will be sampled. We recommend revising the text of the Criticality Safety Evaluation to clarify the sampling approach consistent with the Field Sampling Plan.

EPA	Reviewer: EPA Kashdan_Flannery	Significant? No	Comment #	3906
Document:	**Binder V Env/Saf/Q Docs**	Category: Rad Safety		
Location:	INEEL/EXT-2000-000690 Preliminary Criticality Safety Evaluation Page 8. Section 5			
Comment:				

92. Section 5 is Discussion of Contingencies. Please include a contingency for the potential for buildup of sufficient mass for criticality in the soil vacuuming system, including the soil hopper, soil hopper drum, and the piping and hoses that will be part of this system.

Response by Comment Processing CPT. Per Tri-Party agreement at the 10/3/00 Agency Face-to-Face meeting, we recommend revising Phase I O&M Plan Procedure EOP-006 Sections 4.5 and 4.6 to include limiting clogging and build ups in the SHS for criticality control, and to address the potential role of the digface monitor in criticality control. [This is a consolidated response to comments 3129 (Binder V) and 3906 (Binder V).]

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment # 3130
Document:	**Binder V Env/Saf/Q Docs**	Category: Unspecified	
Location:	INEEL/EXT-2000-00707 Fire Hazards Analysis Page 2 of 71. Section 1.2. Paragraph 2		
Comment:			

31. It is incomprehensible that the potential for a fire or explosion resulting from the placement of sheet pilings was not evaluated in the subject Fire Hazards Analysis (FHA). This evaluation must be performed in support of the Stage II 90% design given that the outcome could potentially have significant consequences in terms of impact to baseline assumptions and overall project direction.

Response by Comment Processing CPT. Per the 10/3/00 Agency Face-to-Face Meeting: An underground fire and/or explosion initiated by shoring pile installation is addressed in Appendix A to USQ Safety Evaluation No. SE-RWMC-99-039. (A copy was provided to the Agencies on 10/9/00.) We recommend adding this USQ to the RD/RAWP package. We also recommend providing additional detail on modeling to be performed, plans for cold testing, and measures planned during installation. Further, we recommend modifying the piling specification to indicate that the Project will provide direction (e.g. driving rates) for piling installation. We do not anticipate the need for design changes, but realize that procedures might have to be updated. [This is a consolidated response to comments 3130 (Binder V), 3163 (Binder XXIV), 3166 (Binder XXIV), 3211 (Binder I-A), and 3990 (Binder I-A).]

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment # 4008
Document:	**Binder V Env/Saf/Q Docs**	Category: Environmental	
Location:	INEEL/EXT-98-00848 Air Emission Evaluation Page 10. Table 3		
Comment:			

236. The inventory data in Table 3 is not consistent with Table 4 of the draft Stage I Subsurface Exploration and Treatability Studies Report. For example, the Pu-239 activity is listed as 24 Ci in Table 3 vs.34 Ci in the draft Report. [Cross reference UCN 3897; 3898; 4007; 4008; and 4009.]

Response by Daryl Lopez. We recommend further evaluation of incorporating the proposed change into the solution. If it is determined that the Stage I data should be used, we believe the Stage II air emissions will still be below the maximum allowables.

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment # 4009
Document:	**Binder V Env/Saf/Q Docs**	Category: Environmental	
Location:	INEEL/EXT-98-00848 Air Emission Evaluation Page 10. Table 3		
Comment:			

237. The 218 number of drums listed is inconsistent with the expected number of drums (non-empty) stated in Table 1 of the draft Stage I Subsurface Exploration and Treatability Studies Report. [Cross reference UCN 3897; 3898; 4007; 4008; and 4009.]

Response by Daryl Lopez. We recommend further evaluation of incorporating the proposed change into the document.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	**4010**
Document:	**Binder V Env/Saf/Q Docs**	Category: Environmental		
Location:	INEEL/EXT-98-00848 Air Emission Evaluation Page 26. Table 13			
Comment:				

238. The value of 5.9 E-01 for TCE AACC is incorrect. IDAPA 58.01.01.586 lists the AACC for TCE as 7.7E-01.

Response by Jim Rose. We recommend incorporating the proposed change in both affected EDF's. The value that was used is more conservative than the suggested value. However, the suggested value is correct.

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	**4007**
Document:	**Binder V Env/Saf/Q Docs**	Category: Environmental		
Location:	INEEL/EXT-98-00848 Air Emission Evaluation Page 5. Table 1			
Comment:				

235. The inventory data should be that expected to be within the design Stage I/II location. Table 4 of the draft Stage I Subsurface Exploration and Treatability Studies Report provides a more defensible source term for Pu especially given the apparent non-uniform disposal of such wastes in Pit 9. [Cross reference UCN 3897; 3898; 4007; 4008; and 4009.]

Response by Daryl Lopez. We recommend further evaluation of incorporating the proposed change into the document.

EPA Reviewer: EPA Kashdan_Flannery Significant? Yes Comment # **3897**
Document: **Binder V Env/Saf/Q Docs** Category: Chemistry/Radiochemistry (SMO)
Location: INEEL/EXT-98-00848 Air Emission Evaluation
Page 9 (no sections listed)
Comment:

83. TABLE 2, ON page 9, shows the expected radioactivity IN the Stage II waste zone BY waste type. However, the total amount OF plutonium(Pu)listed per drum does NOT correspond WITH the total amount OF Pu listed per drum FOR each waste type AS listed IN Binder 5, Preliminary Criticality Safety Evaluation. Discrepancies are listed below :

Table 2, Air Emissions Evaluation:
741 sludge: 4.3 grams Pu/drum
Graphite: 9.9 grams Pu/drum
Non-combustible 3.6 grams Pu/drum
744 sludge: 1 gram Pu/drum
Combustibles: 0.5 grams Pu/drum Table 1, Preliminary Criticality Safety Evaluation741 sludge: 157 grams Pu/drum
Graphite: 61 grams/drum
Non-combustible: 129 grams Pu/drum
744 sludge: 22 grams Pu/drum
Combustibles 45 grams Pu/drum

In addition, Table 1 of the Preliminary Criticality Safety Evaluation lists 743 sludge (16 grams Pu/drum), 745 sludge (0.09 grams Pu/drum), 742 sludge (8.9 grams Pu/drum), and Empty Drums (3.0 grams Pu/drum). These waste types are apparently not included in the Air Emission Evaluation. [Cross reference UCN 3897; 3898; 4007; 4008; and 4009.]

Response by Daryl Lopez. We recommend further evaluation of incorporating the proposed change into the document.

EPA Reviewer: EPA Kashdan_Flannery Significant? Yes Comment # **3898**
Document: **Binder V Env/Saf/Q Docs** Category: Chemistry/Radiochemistry (SMO)
Location: INEEL/EXT-98-00848 Air Emission Evaluation
Page 9 (no sections listed)
Comment:

84. The Air Emission Evaluation text (P. 8) states that the drum loading information used was obtained from Thomas (1999 a, b) to determine a worst-case activity inventory. Suggest that information in the PSA, dated January 2000, be used to provide information for the air emission evaluation. [Cross reference UCN 3897; 3898; 4007; 4008; and 4009.]

Response by Daryl Lopez. We recommend further evaluation of incorporating the proposed change into the document.

OU 7-10 Staged Interim Action Project, Stage II, Title II
Response Report - sorted by Binder/Document

Printed: 10/30/00

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment #	3131
Document:	**Binder V Env/Saf/Q Docs**	Category: Unspecified		
Location:	INEEL/EXT-99-00013 Preliminary Safety Assessment			
	Page 5-4. Section 5.5.3			
Comment:				

32. This section appears to indicate that an independent criticality safety evaluation will be performed each time there is an indication of "no go" and operations are put in STANDBY mode. It is recommended that a single document be prepared to bound the potential scenarios and to identify the appropriate course of action. Otherwise, significant time may unnecessarily be expended in performing individual evaluations.

Response by Rod Peatross. We recommend a minor revision to the PSA that makes it clear that these cases will be evaluated by criticality safety, but that a criticality safety evaluation report might not be required.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment #	3132
Document:	**Binder V Env/Saf/Q Docs**	Category: Unspecified		
Location:	INEEL/EXT-99-00013 Preliminary Safety Assessment			
	Page 5-4. Sections 5.5.3.2 and 5.5.3.3			
Comment:				

33. Please clarify how the digface monitor (DFM) and the material load-out area (MLA) fissile monitor are effective administrative controls during processing of materials in the MHC or SHC. Specifically, the DFM is used to plan retrievals so that the 380-g Pu-239 limit is not exceeded. In addition, the MLA fissile monitor is a post-MHC or -SHC operation and, as such, would appear to have little bearing on the materials handled in the MHC or SHC.

Response by Mark Borland. We recommend further evaluation of incorporating the proposed change into the solution. To clarify how the monitors function as a control, envision the following: The Material Handling Center (MHC) is a fissile mass control area. The Digface monitor (DFM) and the material load-out area monitor (MLA) function as control gates tracking the quantity of material contained within the MHC. The DFM is an input counter and the MLA and output counter. The difference between the input and output is the total fissile mass assumed to be contained in the MHC. This total must be maintained below 380gm per the Criticality Safety Evaluation. Before an ITM load can be transferred to the MHC the fissile content of the ITM must be added to the existing fissile mass contained in the MHC. If the combined quantity exceeds 380gms, then the MHC must package and remove some material before receiving the ITM. To prevent accumulation of errors due to differences in accuracy between the DFM and the MLA, the MHC content can be "zeroed" by emptying the MHC of waste and completing decontamination. We recommend revising Section 5.5.3.2 of the Preliminary Safety Assessment to clarify the accounting of fissile material in the MHC.

EPA | Reviewer: Jim McHugh | Significant? Yes | Comment # 3945
Document: **Binder V Env/Saf/Q Docs** | Category: Technical
Location: INEEL/EXT-99-00013 Preliminary Safety Assessment
Page 6-1. Section 6.3
Comment:

29. What is the justification that the frequency of encountering waste drums containing > 200 grams Pu is equal in the '50s, '60s and '70s waste disposal eras? Do the 17,000 drums represent this total time period? It is my understanding that these data represent more recent (i.e. 1970 and beyond) waste packages.

Response by Rod Peatross. We recommend a minor revision to the PSA to address the applicability of the post 70 data to buried waste.

EPA | Reviewer: Jim McHugh | Significant? No | Comment # 3946
Document: **Binder V Env/Saf/Q Docs** | Category: Technical
Location: INEEL/EXT-99-00013 Preliminary Safety Assessment
Page 6-2. Section 6.3
Comment:

30. The digface fissile material monitor is described as a rectangular neutron detection assembly. The current design involves gamma ray spectroscopy and HPGe detectors. Also, it is stated that use of water in fighting fires is not a concern (i.e. criticality unlikely). Data from the INEEL NDA on the characterization of drums indicates a drum with 60 percent void space, > 1 kg Pu, and a Pu average concentration of 3.1% in the waste material. Has a partially filled drum with significant void space and large quantities of Pu been evaluated relative to water introduction and reflection? These are important factors to be considered in a nuclear criticality safety evaluation of buried fissile waste material and the retrieval of this material. Using averages can get one into trouble.

Response by Todd Taylor. The Criticality Safety Analysis has considered parameters such as mass, geometry, concentration, and moderation. Partially filled drums with void and significant amounts of Pu have been evaluated. Average fissile mass and concentration have not been used to bound potential criticality hazards. In the 10/2/00 Agency Face-to-Face Meeting it was agreed to hold a meeting to discuss and resolve criticality issues. We recommend that this topic be discussed at the meeting.

EPA | Reviewer: EPA Wayne Pierre | Significant? Yes | Comment # 4011
Document: **Binder V Env/Saf/Q Docs** | Category: Environmental
Location: INEEL/EXT-99-00363 Chemical Compatibility Assmt for Stage I & II Waste Generation Activities
Page 2-1. Section 2.1
Comment:

239. The Stage I activities discussion needs updating.

Response by Bob Carpenedo. We recommend updating the Chemical Compatibility Assessment document to show the most current Stage I activities as of the issue of the final design package.

EPA	Reviewer: EPA Wayne Pierre	Significant? Yes	Comment #	4012
Document:	**Binder V Env/Saf/Q Docs**	Category: Environmental		
Location:	INEEL/EXT-99-00363 Chemical Compatibility Assmt for Stage I & II Waste Generation Activities Page 4-4. Section 4.2.1..2			
Comment:				

240. It is stated that testing & screening may be required assumably based on an observational approach. However, given that it is not expected that structurally intact drums will be recovered, how will potential incompatible waste mixing be avoided if testing is not required for all mixed loads?

Response by Brent Burton. We recommend not making a change to the chemical compatibility assessment report, but rather addressing the comment as part of the post-Title II design activities when the operations procedure is written governing this testing. It is felt that the operations procedure is the appropriate place in which to address the detail level associated with this comment.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment #	3122
Document:	**Binder V Env/Saf/Q Docs**	Category: Unspecified		
Location:	PLN-651, INEEL/EXT-2000-00405 QAPjP for TAPS Emissions Monitoring Stage II			
Comment:	General			

23. Please address the May 15, 2000 IDEQ comments on the subject document. These comments have yet to be addressed.

The following are responses to the subject comments (from Binder D1 Environmental Documents):

1. [QAPjP for TAPs Emissions Monitoring of OU 7-10, General (UCN 2797)] Because waste has been buried for a period of many years, has the possibility of biodegradation of the halogenated hydrocarbons been reviewed? For example, under anaerobic conditions, trichloroethylene (TCE) can degrade to vinyl chloride. Given that some degradation byproducts, such as dichloroethylene (DCE) and vinyl chloride are not removed very efficiently by carbon absorption, it would be prudent to periodically make emission measurements of such degradation byproducts. - - Response by Paul Ritter. We recommend no changes to documentation be made based on the comment since the plan already addresses the potential for emission of degradation products by allowing for detection and tentative identification and quantification of TICs. The degradation products are expected to be present at low concentrations relative to the solvents that were buried with the waste, and represent a small hazard relative to the known solvents, particularly carbon tetrachloride. The presence of degradation products will be indicated by unknown peaks in the process GC output. If significant unknown peaks are noticed by the GC/ECD, but cannot be identified/quantified, Method TO14a sampling and analysis will be performed. If the results of GC and Method TO14a measurements show that the risk posed by degradation products is a significant fraction of the overall risk associated with the emissions, the monitoring program will be modified for better coverage of the emissions of the degradation products (i.e., modify the GC operations to quantify the specific degradation product(s) of concern.

2. [QAPjP for TAPs Emissions Monitoring of OU 7-10, Page 13 of 59 section 1.1 (UCN 2798)] While it is perfectly acceptable to describe the three stages of the OU 7-10 project, it is not appropriate to establish a schedule in this document. Please delete all dates. - - Response by Paul Ritter. We recommend deleting dates as stated.

3. [QAPjP for TAPs Emissions Monitoring of OU 7-10, Page 14 of 59 section 1.2 (UCN 2799)] Revise the second sentence as follows: "For Non-Radionuclide emissions, the only ARAR that might require monitoring of the OU 7-10 stack is the TAPs (toxic air pollutants) Rule." - - Response by Paul Ritter. We recommend incorporating the changes.

4. [QAPjP for TAPs Emissions Monitoring of OU 7-10, Page 17 of 59 section 2.1.1 (UCN 2800)] The OU 7-10 staff will perform quarterly and annual calculations of the TAPs emissions released from the REE (sic) HVAC stack. If the stack sampling and monitoring is not an approved method for that specific purpose, then those emissions should be designated as estimated emissions. - - Response by Paul Ritter. We recommend accepting this comment as it applies to our proposal for mercury sampling, assuming that use of the term "estimated emissions" won't compromise our use of the data -- otherwise, we should discuss further with the Agencies. I don't think that there are any reference methods for continuous sampling for mercury. Method 5 is for short term sampling under steady-state operation of e.g., a coal-fired power plant, and would not be appropriate for monitoring a retrieval operation. The proposed method is expected to be sufficiently sensitive to measure mercury emissions at a small fraction of the AAC. The GC CEMS will be operated to EPA Performance Specification 9, and data from the GC should be acceptable as measurement of "emissions", not qualified as

"estimated emissions." Method TO-14a is not approved for stack sampling -- just for ambient air. My understanding (based on conversations with Rema Howell at EPA/Research Triangle) is that Method TO-14a wasn't approved for stack sampling because some canisters are too reactive, and the manufacturer of a potentially acceptable canisters (Restek Inc.) hasn't provided information to support the claim that their canisters are sufficiently passive. We accept this comment with respect to emissions measured using TO-14A, particularly because we don't plan to do continuous sampling into canisters. A CEMS will generally give more reliable emissions data than results of periodic sampling and analysis.

5. [QAPjP for TAPs Emissions Monitoring of OU 7-10, Page 22 of 59 section 3.3 (UCN 2801)] This section states that flow measurement will conform to ANSI 99. Is this the 1999 revision to ANSI 13.1-1969? If not, what is the official ANSI document number and title? - - Response by Paul Ritter. Yes, ANSI 99 refers to ANSI/HPS N13.1-1999, "Sampling and Monitoring Releases of Airborne Radioactive Substances from the Stacks and Ducts of Nuclear Facilities."

6. [QAPjP for TAPs Emissions Monitoring of OU 7-10, Page 22 of 59 section 3.3 (UCN 2802)] This section states that 1,1,1-trichloroethane (TCA), a non-carcinogen, is in the Pit 9 inventory. However, the Record of Decision does not speciate the TCA between 1,1,1-TCA and 1,1,2-TCA, a carcinogen. Therefore, if other measurements are made in concert with CCl4 measurements, these measurements should involve 1,1,1-TCA and 1,1,2-TCA. - - Response by Paul Ritter. My understanding (from discussions with Richard Roblee) is that there is no 1,1,2 TCA in the inventory based on Rocky Flats records, and because it really isn't used in industry. Unless there is something particularly difficult about detecting/measuring 1,1,2 TCA, if present, it should be characterized as part of the TIC analysis. If present in substantial amounts (as determined by comparison to the risk-weighted releases of carbon tetrachloride) then we should consider more intensive sampling/analysis for 1,1,2 TCA.

7. [QAPjP for TAPs Emissions Monitoring of OU 7-10, Page 22 of 59 section 3.3 (UCN 2803)] This section states that TCA and tricholoethylene (TCE) pose most of the non-carcinogen risk. Note that TCE and 1,1,2-TCA are considered by EPA to be carcinogens. - - Response by Paul Ritter. As of 10/17/00, the IDAPA regulations list TCE (trichloroethylene) as a carcinogen. The EPA IRIS database states "The carcinogen assessment summary for this substance has been withdrawn following further review. A new carcinogen summary is in preparation by the CRAVE Work Group." The EPA's Supervened Technical Support Center does provide slope factors for TCE, although the web page prints with a "DO NOT QUOTE OR CITE" header. The risk assessment for VOC emissions from the OU7-10 RAE stack also treated TCE as a carcinogen, and found that TCE would not be an important contributor to carcinogenic risk. As noted in the response for item 7, 1,1,2 TCA is not believed to be in the inventory.

8. [QAPjP for TAPs Emissions Monitoring of OU 7-10, Page 26 of 59 section 4.1.2 (UCN 2804)] This section states that either CG/ECD or EPA Method TO-14A may be used to measure the VOC concentration in the stack. Method TO-14A is approved by EPA for the monitoring of ambient air, and not for stack measurement. In order to meet EPA approval for stack measurement, the conditions delineated in 10 CFR 60 must be met. - - Response by Paul Ritter. The GC/ECD CEMS will be operated in accordance with Performance Specification 9 from 40CFR60 App. B. The GC/ECD CEMS will probably be the primary basis for our emissions estimates of the VOCs that are known to be in the inventory, and that drive the risk estimates. I agree concerning method TO-14a -- although Method TO14a might be technically defensible, it is not approved for stack sampling -- just for ambient air. My understanding (based on conversations with Rema Howell at EPA/Research Triangle) is that Method TO14a wasn't approved for stack sampling because some canisters (unlike the Restek Silcosteel canisters that we specified) are too reactive to be considered acceptable for source testing/measurement.

OU 7-10 Staged Interim Action Project, Stage II, Title II
Response Report - sorted by Binder/Document

EPA Reviewer: EPA Wayne Pierre Significant? Yes Comment # **4013**

Document: **Binder V Env/Saf/Q Docs** Category: Environmental

Location: PLN-651, INEEL/EXT-2000-00405 QAPjP for TAPS Emissions Monitoring Stage II Page 24. Table 3-1

Comment:

241. What is the basis for selecting 90% completeness? For critical samples a 100% completeness should be the goal.

Response by Paul Ritter. We recommend no change to the document as a result of this comment. The objectives were set so that some data loss could be tolerated without qualifying the emissions estimates. Missing 1 sample in 100 or even 10 in 100, at random times, probably won't have any adverse affect on the quality of our emissions estimates.

EPA Reviewer: EPA Wayne Pierre Significant? Yes Comment # **4014**

Document: **Binder V Env/Saf/Q Docs** Category: Environmental

Location: PLN-651, INEEL/EXT-2000-00405 QAPjP for TAPS Emissions Monitoring Stage II Page 24. Table 3-1

Comment:

242. PS-9 as given at 40 CFR Part 60 Appendix B, is not a testing method, it is a specification for GC continuous emission monitoring. Also, the specification precision as stated in Section 4.6 should be <5%.

Response by Brent Burton & Paul Ritter. We recommend changing the heading for the table to reflect the fact that PS-9 is not a testing method. We agree that the precision specification should be less than 5%, per PS-9, section 13.2.

Page 54 of 129	OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document	Printed: 10/30/00

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment #	3123
Document:	**Binder V Env/Saf/Q Docs**	Category: Unspecified		
Location:	PLN-652, INEEL/EXT-2000-00407 QAPjP - NESHAPs Monitoring of Pit 9 of Stage II			
Comment:	General			

24. Please address the May 15, 2000 IDEQ comments on the subject document. These comments have yet to be addressed.

The following are responses to the subject comments (from Binder D1 Environmental Documents):

9. [QAPjP for NESHAPs Monitoring of OU 7-10, General (UCN 2805)] PSD Requirements: This document cites the requirements from 10 CFR 61, Subpart H (Radionuclide NESHAPs) monitoring, however there is no mention of IDAPA 16.01.01.003.93.b. In accordance with this regulation, the radionuclide emissions are significant, and prevention of significant deterioration (PSD) rules are applicable. Is this information discussed in another document? - - Response by Paul Ritter and Brent Burton. We recommend making no change to the document. The citations appear to be in error. The information is not discussed in another document because the ROD ARARs do not include IDAPA PSD rules for radionuclides. It is agreed that the radionuclide emissions would be significant as defined by IDAPA; however, it is not clear what additional substantive actions this implies considering that the project is employing HEPA filtration (i.e., BACT) to control radionuclide emissions.

10. [QAPjP for NESHAPs Monitoring of OU 7-10, General (UCN 2806)] ANSI Standards: This document cites compliance with ANSIN 13.1-1999, however, this standard has not been officially adopted by 10 CFR 61, Subpart H. Also, the current standard, ANSIN 13.1-1969, was the applicable regulation at the time of ROD signature. - - Response by P· ul Ritter. Continuous record sampling must be performed for the OU7-10 retrieval in accordance with 40 CFR 61, Appendix B, Method 114. Method 114 incorporates by reference ANSI N13.1-1969, "American National Standard Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities," which was updated and superceded by a revision released in May 1999 (referred to here as ANSI 99). The 1969 version of ANSI N13.1 (referred to here as ANSI 69) is no longer endorsed by the ANSI, and the EPA has proposed in new rulemaking (USEPA, Notice of Proposed Rulemaking, NESHAP Subpart H, Federal Register, May 9, 2000, Volume 65, Number 90, pages 29933-29937) that stack monitoring systems constructed before October 1, 2000, which comply with ANSI 69, are acceptable, and that stack monitoring systems constructed after October 1, 2000 must comply with ANSI 99. We recommend further evaluation and discussions among the parties on this topic.

11. [QAPjP for NESHAPs Monitoring of OU 7-10, General (UCN 2807)] Emission Points: This document describes the emissions from the REE (sic) HVAC stack. The NESHAPs requires documentation of all emissions, including fugitive emissions. Are there any other possible radionuclide emission points that should be documented? - - Response by Paul Ritter and Brent Burton. The EDF Operable Unit 7-10 (Pit 9) Interim Action Project, Stage II Air Emissions Evaluation, ER-WAG7-109, Rev 0, is the project report that documents all of the emissions sources for the Stage II project including emissions from the CERCLA storage facility. The evaluation did not identify any fugitive emissions sources for radionuclides. The QAPjP document is limited to addressing emissions from the RAE stack because this emissions point was the only point identified in the Stage II air emissions evaluation EDF as requiring monitoring.

12. [QAPjP for NESHAPs Monitoring of OU 7-10, Page 6 of 38 section 1.1 (UCN 2808)] Please delete reference to dates. Project schedules are not to be established in this document. - - Response by Paul Ritter. We recommend deleting the dates as stated.

13. [QAPjP for NESHAPs Monitoring of OU 7-10, Page 22 of 38 section 4.2.1 (UCN 2809)] In accordance with 40 CFR 61.93, Subpart H, stack gas velocity and volumetric flow rate is to be determined using 40 CFR 60, Appendix A Methods 2 of 2A, depending on the pipe and flow conditions. If the flow conditions are unacceptable, an alternative method to Method 2/2A must be provided for approval. - - Response by Paul Ritter. Continuous record sampling must be performed for the OU7-10 retrieval in accordance with 40 CFR 61, Appendix B, Method 114. Method 114 incorporates by reference ANSI N13.1-1969, "American National Standard Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities," which was updated and superceded by a revision released in May 1999 (referred to here as ANSI 99). The 1969 version of ANSI N13.1 (referred to here as ANSI 69) is no longer endorsed by the ANSI, and the EPA has proposed in new rulemaking (USEPA, Notice of Proposed Rulemaking, NESHAP Subpart H, Federal Register, May 9, 2000, Volume 65, Number 90, pages 29933-29937) that stack monitoring systems constructed after October 1, 2000 must comply with ANSI 99, and that the velocity and flow measurements should also be conducted in accordance with ANSI 99. The ANSI 99 method is a variant of EPA Method 2. We recommend further evaluation and discussions among the parties on this topic.

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3138**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: EDF-ER-160, OU 7-10, Stage II, D&D/Closure Planning and Requirements Investigation Appendix B. General

Comment:

39. As there is no extra space within the proposed OU 7-10 CERCLA storage facility, please describe where all bagged-out equipment, etc. will be stored during cold standby.

Response by Jeff Bryan. We recommend no changes to Stage II documents at this time. This topic should be addressed through Change Request (CR) process. After approval of an appropriate CR, we recommend a trade study to evaluate alternatives for storing bagged out equipment. Rationale: EDF-ER-160, when issued (i.e., Rev. 0), should drive the initiation of several CRs that would affect the Stage II baseline by adding/modifying requirements as indicated in Appendix D of EDF-ER-160. Implementation of these CRs would include flowdown of applicable requirements to the DRDs and the ORD. Note that proposed requirement #8 (in App. D) creates the basis for Stage II designs to accommodate maintaining Stage II facilities, equipment, and processes in a cold standby state. Providing storage space for bagged-out equipment should be a flowdown requirement from #8. Many alternatives exist for meeting such a flowdown requirement (e.g., heated cargo container(s), expanded Stage II storage building) and should be analyzed via trade study to ensure a cost-effective solution.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

IDEQ Reviewer: IDEQ Jean Underwood Significant? Yes Comment # **3141**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: EDF-ER-160, OU 7-10, Stage II, D&D/Closure Planning and Requirements Investigation Appendix B. Page 11 of 11. Item 16F

Comment:

42. Please provide justification for not maintaining radiation and hazardous gas monitoring at the stack during cold standby. Furthermore, indicate when an evaluation of air emissions during cold standby will be prepared. It may be beneficial to prepare such an evaluation once Stage II operational data is available.

Response by Jeff Bryan. For clarification, we recommend adding the following justification to the Appendix B assumptions in EDF-ER-160 as to why radiation and hazardous gas monitoring is not maintained at the stack during cold standby:
1) the source term is assumed to have been removed from the Stage II area
2) the absence of operations to "stir up" contaminants
3) the cover installed over the excavation area is assumed to prevent migration of contaminants from the pit
4) RAE interior is assumed to have had loose contamination removed, contained, or affixed
5) HEPA/Carbon filters in main exhaust still in place/functioning (no DP though)
6) Exhaust fans are assumed to be deactivated so there would be no airflow stream to speak of from which the monitors could measure concentrations of contaminants.
We also recommend performing an air emissions evaluation for the cold standby period to validate/invalidate these assumptions for future planning. It is agreed that this evaluation would best be performed when Stage II operational data is available (e.g., when it is known what source term remains in the excavation area). Note that stack air samples may be taken manually as needed.

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3139**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: EDF-ER-160, OU 7-10, Stage II, D&D/Closure Planning and Requirements Investigation Appendix B. Page 2 of 11. Item 6

Comment:

40. If a release occurs within the secondary confinement structure, please clarify whether or not decontamination of the secondary confinement structure will be performed to mitigate the further spread of contamination.

Response by Jeff Bryan. We recommend the development of an OU 7-10 Stage II facility-specific radiological/ hazardous contaminant release response plan(s) for inclusion in the RWMC Addendum to the INEEL Emergency Response/RCRA Contingency Plan prior to operations. This plan (or plans) should focus on control and mitigation actions/methods and the resumption of Stage II operations (or Stage II close-out activities) in the event that a release has occurred within the secondary confinement. Rationale: While releases that occur during cold standby are out of scope for Stage II (i.e., currently planned as a part of Stage III), releases could occur during Stage II operations or closeout activities. An emergency preparedness/response plan should be in place to mitigate the further spread of contamination.

OU 7-10 Staged Interim Action Project, Stage II, Title II
Response Report - sorted by Binder/Document

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3140**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: EDF-ER-160, OU 7-10, Stage II, D&D/Closure Planning and Requirements Investigation Appendix B. Page 5 of 11. Item 7

Comment:

41. Consideration should be given to the covers having integral carbon filters as well as integral HEPA filters.

Response by Jeff Bryan. For clarification, such consideration is reflected in proposed new requirements #20 - 22 and #37 - 39 contained in Appendix D of this EDF. We recommend that the text in the Notes/ Assumptions column of Appendix B be modified to reflect the need to contain hazardous and radiological contaminants rather than specifying exact solutions of the design. Rationale: Provide clarification on intended plans for final design.

IDEQ Reviewer: IDEQ Jean Underwood Significant? Yes Comment # **3136**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: EDF-ER-160, OU 7-10, Stage II, D&D/Closure Planning and Requirements Investigation Page 10 of 20. Section 1.2. Last Paragraph

Comment:

37. Final closure of the Stage II excavation/retrieval area is not to await final closure of the entire Subsurface Disposal Area (SDA). Instead, closure should be addressed in accordance with the OU 7-10 ROD.

Response by Jeff Bryan. Recommend deleting the text ", or the entire Subsurface Disposal Area (SDA)" in the second sentence of the last paragraph of Section 1.2 as well as other occurrences of the phrase throughout EDF-ER-160. Rationale: Delete phrase to avoid confusion. For clarification, inclusion of the phrase was intended only to leave an option open for addressing a covered void (one possible future state) at a later time when residual risks present in Pit 9 are evaluated as a part of OU 7-13/14. This end state is conceivable if full-scale remediation proves infeasible or that Stage III entails "hot-spot" retrieval(s).

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3137**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: EDF-ER-160, OU 7-10, Stage II, D&D/Closure Planning and Requirements Investigation Page 16 of 20. Section 3.1. Paragraph 2. Bullet 2

Comment:

38. DOE has made an assumption that double confinement of the excavation area is eliminated for its post-operations life cycle phases. Please explain how this assumption is consistent with DOE order requirements. While the RAE may not have a separate secondary confinement structure that moves with it during relocation, IDEQ recommends that an evaluation be performed to determine if secondary confinement may be achieved in some other equivalent manner.

Response by Jeff Bryan. We recommend performing an analysis to determine if double confinement is needed for the post operations retrieval area and during move of the RAE.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3135**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: EDF-ER-160, OU 7-10, Stage II, D&D/Closure Planning and Requirements Investigation

Comment: Page 9 of 20, Section 1.1, Paragraph 2

36. IDEQ agrees that relocation of the Stage II facilities and equipment is not expected as part of Stage II; however, the possibility cannot be definitively eliminated at this point in time.

Response by Jeff Bryan. We recommend that no changes be made to Stage II documents other than those proposed in EDF-ER-160. Proposed TFR requirement #6 (see App. D of EDF-ER-160), and its rationale, describe the planned end-state of Stage II, to occur when Stage II facilities are placed into cold standby. Any relocation of these facilities is anticipated to be a part of the Stage III effort (TBD). It is recognized that this planned end-point for Stage II (not yet baselined) could be changed to include one or more relocations as needed via the approval of a Change Request (CR) defining the additional scope and a new Stage II endpoint.

IDEQ Reviewer: IDEQ Jean Underwood Significant? Yes Comment # **3133**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: EDF-ER-160, OU 7-10, Stage II, D&D/Closure Planning and Requirements Investigation

Comment: Summary, Recommendation 1

34. DOE recommends that a trade study be performed to select the preferred means for performing the RAE relocation. IDEQ expected that this trade study be submitted as a component of the Stage II 90% RD/RAWP. It is imperative that such a trade study be performed so that there is an opportunity to affect the RAE design in a timely manner.

Response by Comment Processing CPT. As agreed to in the 10/2/00 Agency Face-to-Face Meeting, we recommend modifying the appropriate construction specifications to require the construction subcontractor to provide a detailed relocation plan describing how the facility will be relocated. The plan would be reviewed by the Agencies during the constructability review.

IDEQ Reviewer: IDEQ Jean Underwood Significant? Yes Comment # **3134**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: EDF-ER-160, OU 7-10, Stage II, D&D/Closure Planning and Requirements Investigation

Comment: Summary, Recommendation 5

35. IDEQ agrees that further discussion is needed regarding the end-state of Pit 9 following Stage III. However, note that any decisions regarding end-state must be consistent with criteria established in the OU 7-10 Record of Decision (ROD).

Response by Jeff Bryan. We recommend modifying the second to the last sentence of recommendation #5 to read: "These alternatives and conditions could affect Stage II plans and designs (see Note 3) and must be consistent with criteria established in the OU 7-10 Record of Decision (ROD)." Rationale: Provides further clarification and bounds for the end-state of Stage II.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

EPA Reviewer: Jim McHugh Significant? Yes Comment # **3947**

Document: **Binder VI Misc Docs** Category: Technical

Location: EDF-ER-175, MHC and DFM Characteristics and Capabil

Comment: Page 1. Summary

31. It is concluded that gamma ray detection techniques using germanium detectors are the preferred approach to digface and MHC drum fill monitoring. No discussion is provided on the use of the germanium detectors for Am 241 monitoring. It is stated in other documents that the gamma monitoring will involve both high-energy and low-energy regions of the spectrum. Optimizing the digface monitor to evaluate soil content using the 60 keV Am 241 emission could save considerable effort characterizing overburden (use the standard in situ gamma spectroscopy methodology).

Response by Comment Processing CPT. The current DFM addresses criticality monitoring requirements. If CR-170 adds digface characterization requirements, solutions such as the reviewer's will be considered for implementing the new requirements. We agree that Am-241 is a significant concern for contamination control; the existing design was developed to mitigate this concern. If CR-170 is implemented, Am-241 data would be available to assist day-to-day retrieval planning. [This is a consolidated response to comments 3930 (Binder II), 3947 (Binder VI), and 3980 (Binder XVIII-A).]

EPA Reviewer: Jim McHugh Significant? Yes Comment # **3948**

Document: **Binder VI Misc Docs** Category: Technical

Location: EDF-ER-175, MHC and DFM Characteristics and Capabil

Comment: Page 3. Section 2.0

32. Drum fill monitoring at the MHC uses 2 HPGe detectors to monitor a drum as it is being filled. The fixed location of the detectors and stationary drum result in large uncertainties relative to a segmented gamma scanner. A single germanium detector monitoring the waste (within the MHC) in small volume increments, prior to placing it in the drum, would provide a better estimate of drum fissile material loading. One could create a more favorable geometry involving a smaller volume compared to a total drum volume. This increased accuracy would eliminate the need for a segmented gamma scanner to provide the better estimate of loading. The assay system would provide the required accuracy for the fissile material content. Two detector systems in the MHC would replace the five or six detectors presently planned. The equipment savings could be directed toward the SHC, and provide monitoring during fill in a way that provides reliable soil characterization at 10 nCi/gram. [See also UCN # 3977.]

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

OU 7-10 Staged Interim Action Project, Stage II, Title II
Response Report - sorted by Binder/Document

EPA Reviewer: EPA Kashdan_Flannery Significant? No Comment # **3907**

Document: **Binder VI Misc Docs** Category: Other (clarification/wording)

Location: PLN-632, OU 7-10 SIA Project Physical Security Plan, INEEL Company Manual 11
Page 7 and 8. Section 6.5.7

Comment:

93. This section shows that the storage building will have a primary confinement structure for securing objects (drums or other) pending identification. "Securing" includes controlled access via a specific type of lock, and preventing visual access. Storage building diagrams in other binders do not show a controlled access area. Binder 11C does describe this briefly in SDD-23 (Storage System), and states in Section 4.1.3.1.8, Page 26, that a controlled access section will not be constructed unless classified materials are discovered, at which time a simple barrier, such as a chain-link fence, will be erected. A chain link fence alone will not prevent visual access; hence, the requirements of the Physical Security Plan do not appear to have been entirely communicated to the Storage System design team. An alternate barrier to prevent visual access, or an addition to a chain-link fence, will be needed to fully meet the physical security needs.

Response by Patricia Jurbala. Recommend adding a drawing to the Specification that shows a designated storage area that will be constructed, if necessary. Note: visual access is not a problem because all materials will be concealed inside of drums. No other document changes are necessary.

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3142**

Document: **Binder VI Misc Docs** Category: Unspecified

Location: PLN-632, OU 7-10 SIA Project Physical Security Plan, INEEL Company Manual 11
P ge 7 of 9. Section 6.5.6

Comment:

43. The Physical Security Plan indicates that operations will essentially cease when a camera or video recorder becomes inoperable. In order that operational down time is kept to a minimum, IDEQ recommends that back-up or replacement equipment is readily available.

Response by Patricia Jurbala. We recommend adding a requirement in the Operations and Maintenance Plan to maintain camera spares for use if the camera or video recorder becomes inoperable. The Security Plan should remain "as is" because it adequately protects the security interests by ceasing loading operations until a camera is operational.

EPA Reviewer: Jim McHugh Significant? Yes Comment # **3949**

Document: **Binder VII-A O&M Plan & App A-F** Category: Rad Safety

Location: O&M Plan-678
Page 9. Section 3.5.1.11

Comment:

33. Generally it is not the radcon engineer that performs these duties. It is the radcon technician.

Response by Dave Everett. We recommend deleting the word "Engineer" and replacing it with the word "Technician" This action would result in properly identifying the group responsible for performing the described work activities.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? Yes	Comment # 3143
Document:	**Binder VII-A O&M Plan & App A-F**	Category: Unspecified	
Location:	O&M Plan-678, Appendix E, Normal Ops Plan/Procedures		
Comment:	General		

44. There is a lack of overall detail in the procedures included in Appendix E. IDEQ provides the following three examples to support our observation. First, PAP-009 (Page 5 of 9, Section 4.3.7) indicates that uncontainerized liquids will be absorbed at the digface but does describe how this is to be accomplished. Second, PAP-009 (Page 8 of 9, Section 5) does not detail operational physical and chemical data needs and observations to be noted during retrieval. Third, PAP-011 (Page 4 of 5, Section 4.3) does not describe how to process and label wet/dry secondary waste generated as a result of decontamination activities. IDEQ requests that the procedures be sufficiently detailed and include appropriate performance standards as part of the Stage II 90% RD/RAWP.

Response by Comment Processing CPT. As discussed at the 10/3/00 Agency Face-to-Face Meeting, no change to the RD/RAWP package is required in response to this comment. As agreed to, and documented in EDF-ER-151, the requirement for the Phase I O&M Plan is to "identify/outline procedures/plans". Detailed procedures are not required as part of the RD/RAWP package. [This is a consolidated response to comments 3099 (Binder I-A) and 3143 (Binder VII-A).]

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment # 3144
Document:	**Binder VII-A O&M Plan & App A-F**	Category: Unspecified	
Location:	O&M Plan-678, Appendix E, Normal Ops Plan/Procedures, EOP-006 Operating the SVS		
Comment:	Page 8 of 18, Paragraph 3		

45. Please describe how confinement will be maintained or contamination spread minimized when the side access door on the hopper is opened. This should be part of the procedures.

Response by Bob Carpenedo. We recommend adding verbiage to EOP-006 paragraph 4.6 that describes how confinement will be maintained and contamination spread minimized if the access panel on the SVS hopper is to be opened. The hopper and panel are already in a glovebox therefore confinement is maintained. To minimize contamination spread the hopper will be verified empty prior to removing the panel. All work will be through gloveports.

EPA	Reviewer: Jim McHugh	Significant? Yes	Comment # 3950
Document:	**Binder VII-B App G**	Category: Quality	
Location:	O&M Plan-678, Appendix G, Training Plan		
Comment:	Page B1, Appendix B		

34. The experience requirements cited in the text for operators and technicians are weak for such a sensitive radiological undertaking. This may be a nonreactor nuclear facility, but the system concepts are new and radiological consequences are not trivial.

Response by Patricia Jurbala. We recommend not pursuing the action proposed in the comment because the minimum experience complies with DOE Order 5480.20A, "Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities". Stringent qualification requirements for personnel working in radiological control areas are found in PRD-183, "INEEL Radiological Control Manual", and fully comply with the requirements of 10 CFR 835. A complete program description is found in the INEEL Radiation Control Manual (e.g., Part 4).

EPA Reviewer: EPA Wayne Pierre Significant? Yes Comment # **4020**
Document: **Binder VII-C App H-O** Category: Environmental
Location: O&M Plan-678, Appendix J, EDF-ER-137, INEEL/EXT-2000-00531, Liquid Management Plan Page 11. Section Table 3
Comment:

248.** Care should be taken over introducing significant quantities of water in areas with high fissile material loadings. An estimate on a limiting quantity of water that can be introduced based on Dig Face Monitor reading should be made.

Response by Todd Taylor. In the 10/2/00 Agency Face-to-Face Meeting it was agreed to hold a meeting to discuss and resolve criticality issues. We recommend that this topic be discussed at the meeting.

EPA Reviewer: EPA Wayne Pierre Significant? Yes Comment # **4021**
Document: **Binder VII-C App H-O** Category: Environmental
Location: O&M Plan-678, Appendix J, EDF-ER-137, INEEL/EXT-2000-00531, Liquid Management Plan Page 12. Section 3.1
Comment:

249. It may be more appropriate for planning purposes to assume that a single drum may contain up to 55 gal of liquid and that a drum may rupture upon transfer from the ITM in the MHC.

Response by Brent Burton. We recommend that the suggested assumption be included as a maximum or bounding assumption.

IDEQ Reviewer: IDEQ Jean Underwood Significant? Yes Comment # **3145**
Document: **Binder VII-C App H-O** Category: Unspecified
Location: O&M Plan-678, Appendix J, EDF-ER-137, INEEL/EXT-2000-00531, Liquid Management Plan Page 15 of 26. Table 4
Comment:

46. Please indicate when the specific procedure for management of unknown liquids will be prepared. It is imperative that procedures be developed to address how unknown containerized liquids will be managed to comply with safe storage and chemical compatibility objectives.

Response by Bob Carpenedo. We recommend preparing an annotated outline for a special procedure for management of unknown liquids. The procedure itself would be completed for issue with the other special handling/operations procedures.

EPA Reviewer: EPA Wayne Pierre Significant? Yes Comment # **4022**
Document: **Binder VII-C App H-O** Category: Environmental
Location: O&M Plan-678, Appendix J, EDF-ER-137, INEEL/EXT-2000-00531, Liquid Management Plan Page 24. Appendix B
Comment:

250. The discussion on the WERF needs updating.

Response by Brent Burton. We recommend updating the appendix re: WERF as requested.

OU 7-10 Staged Interim Action Project, Stage II, Title II Response Report - sorted by Binder/Document

Printed: 10/30/00

EPA Reviewer: EPA Wayne Pierre Significant? Yes Comment # **4019**

Document: **Binder VII-C App H-O** Category: Environmental

Location: O&M Plan-678, Appendix J, EDF-ER-137, INEEL/EXT-2000-00531, Liquid Management Plan Page 7. Section 2.1.2

Comment:

247. Given that coring data will not likely become available, it may be more appropriate for planning purposes to assume that a single drum may contain up to 55 gal of liquid at a <1% frequency.

Response by Brent Burton. We recommend that the suggested assumption be included as a maximum or bounding assumption.

EPA Reviewer: EPA Wayne Pierre Significant? Yes Comment # **4023**

Document: **Binder VII-C App H-O** Category: Environmental

Location: O&M Plan-678, Appendix L, Spill Prevention Control and Counter Measures Plan General

Comment:

251. This document is incomplete.

Response by Brent Burton. We recommend not changing the document in response to the comment. The document was submitted as an annotated outline per agreement with the Agencies and will be completed post Title II. If the reviewer believes the outline is incomplete a specific comment is in order.

EPA Reviewer: EPA Wayne Pierre Significant? Yes Comment # **4024**

Document: **Binder VII-C App H-O** Category: Environmental

Location: O&M Plan-678, Appendix M, Storage Facility Waste Acceptance Criteria (WAC) General

Comment:

252. This document is incomplete.

Response by Brent Burton. We recommend not changing the document in response to the comment. The document was submitted as an annotated outline per agreement with the Agencies and will be completed post Title II. If the commentor believes the outline content is not complete a specific comment is in order.

IDEQ Reviewer: IDEQ Jean Underwood Significant? No Comment # **3146**

Document: **Binder VII-C App H-O** Category: Unspecified

Location: O&M Plan-678, Appendix N, INEEL/EXT-2000-00857, Master Test and Evaluation Plan Page 8-2. Section 8.3. Paragraph 2

Comment:

47. Test reports must be made available to the Agencies for review in support of the pre-final inspection to be performed before Stage II operational start up.

Response by Phil Rice. We recommend incorporating the proposed change into the solution. The test reports should be provided to the Agencies as requested.

EPA Reviewer: EPA Wayne Pierre Significant? Yes Comment # **4025**

Document: **Binder VII-C App H-O** Category: Environmental

Location: O&M Plan-678, Appendix O, Inspection and Monitoring of Drums

Comment: General

253. The document is specific to drums, however, other containers (e.g., used ITM's) may also be stored and should be addressed.

Response by Doug Morrell. We recommend that when this annotated outline is completed as a Technical Procedure that it be written to support inspection and monitoring for all approved and reasonable storage containers.

EPA Reviewer: Jim McHugh Significant? Yes Comment # **3951**

Document: **Binder VII-D App P** Category: Technical

Location: O&M Plan-678, Appendix P, DOE/ID-107773, Operations Requirements Document (ORD)

Comment: Page 21, Section 3.1.5.2

35. The statement that "a TRU constituent level of 10 nCi/gram for the population of drums to be returned to the pit has been identified" is not consistent with TSRs, SRDs and statements made in numerous sections of the RD/RA Work Plan.

Response by Comment Processing CPT. As presented at the 10/2/00 Agency Face-to-Face Meeting, we recommend that the issues posed by these comments be resolved by conducting a trade study to determine the most appropriate approach (technically and cost/ schedule) for assay of soil and waste, with considerations for impact to, and interfaces with, the Soils Trade Study and criticality measurement equipment and processes. The outcome of the trade study would be the basis for development of a Change Request. [This is a consolidated response to comments 3918 (Binder I-A), 3919 (Binder I-A), 3920 (Binder I-A), 3922 (Binder I-A), 3927 (Binder II), 3928 (Binder II), 3929 (Binder II), 3937 (Binder V), 3939 (Binder V), 3948 (Binder VI), 3951 (Binder VII-D), 3955 (Binder XI-C), 3956 (Binder XI-C), 3957 (Binder XI-C), 3965 (Binder XIX), 3966 (Binder XIX), 3967 (Binder XIX), 3968 (Binder XIX), 3969 (Binder XIX), 3971 (Binder XIX), 3972 (Binder XIX), 3977 (Binder XVIII-A), 3981 (Binder XVIII-A), 3982 (Binder XVIII-A), 3983 (Binder XXVI), 4038 (Binder XIX), 4097 (IRC), 4098 (IRC), 4099 (IRC), and 4100 (IRC).]

OU 7-10 Staged Interim Action Project, Stage II, Title II
Response Report - sorted by Binder/Document

Printed: 10/30/00

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment #	3147
Document:	**Binder VIII Prefinal Inspection Checklist**	Category: Unspecified		
Location:	PFIC-000, Prefinal Inspection Checklist Appendix A. General			
Comment:				

48. Instead of the pre-final inspection checklist categories of "satisfactory" and "open", IDEQ recommends the following categories: incomplete; complete; complies; and, does not comply. This allows for items to be completed differently from that initially envisioned in planning documents as long as the specified requirements are satisfied.

Response by Phil Rice. We recommend incorporating the proposed change into the solution. In addition, instructions should be included in the body of the PFIC as follows (paraphrased): INCOMPLETE - means that the item has not been finished and therefore remains open until completed. COMPLETE - means that the item has been finished. COMPLIES - means that the item complies with either the verbatim requirement or the spirit and intent of the requirement. This allows for items to be completed differently from that initially envisioned in planning documents as long as the specified requirements are satisfied. DOES NOT COMPLY - means that the item does not meet either the verbatim requirements or the spirit and intent of the requirements. NOTE: Two (2) marks would be required for each line element on the checklist: 1) COMPLETE/INCOMPLETE and 2) COMPLIES/DOES NOT COMPLY. Items that are complete may or may not be in compliance with specified requirements. The NOTES field would be retained in the PFIC so that notes on INCOMPLETE or DOES NOT COMPLY items could be entered and tracked.

IDEQ	Reviewer: IDEQ Jean Underwood	Significant? No	Comment #	3148
Document:	**Binder VIII Prefinal Inspection Checklist**	Category: Unspecified		
Location:	PFIC-000, Prefinal Inspection Checklist Appendix A. Page 3 of 8. Inspection Item 6			
Comment:				

49. A facility VOC monitor system should be added to the pre-final inspection checklist. In addition, if HEPA and carbon filters are not considered part of the "EEF HVAC System", then these items should be identified as a separate system on the pre-final inspection checklist.

Response by Phil Rice. We recommend incorporating the proposed change into the solution. The VOC monitoring system should be added to Section 6 "Systems and Components" and Section 9 "Inspections and Maintenance" of the PFIC. Note that PAP-018 "Monitoring Volatile Organic Compounds (VOC) and Mercury (Hg)" is included in the checklist. Other than those directly associated with instrumentation, there are no HEPA and carbon filters not associated with the EEF HVAC System.